THE LANCET.

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An Address
ON
THE TREATMENT OF WOUNDS IN WAR.

Delivered before the Medical Society of London on Nov. 16th, 1914,

BY SIR W. WATSON CHEYNE, BART., C.B., F.R.S., LL.D. EDIN.,
PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

MR. PRESIDENT AND GENTLEMEN,—I propose to-night to limit my share in the discussion on "Surgical Experiences in the present War" to the treatment of wounds sustained from missiles. The treatment of these injuries naturally falls under two headings: (1) The treatment of the wound itself, and (2) the treatment of the various injuries which may be done to the structures or organs through which the missile passes.

It seems to me that at this stage of the war the most urgent and profitable heading to discuss is the first—viz., the treatment of the wound as a wound, apart from the other injuries which may be present. As regards the latter, we can as yet only speak of individual cases, which, however interesting to the surgeon himself, are not sufficiently numerous or advanced to enable us to make any fresh generalisations apart from those which have already been made in connexion with other wars.

THE CHARACTER OF WOUNDS IN WAR.

Naval wounds are practically entirely caused by fragments of shell or portions of the ship itself, broken up by the shells, and these produce large, ragged, lacerated wounds which cannot scab over, and where bones are injured they are very much broken up. We have not had from our ships a single instance of a bullet wound, but we had some bullet and also some shrapnel wounds among the marines from Antwerp. A considerable number of the wounds have also been complicated with burns, while in many cases there have been burns without any wound, as the result of the explosion of the enemy's shells or of our own.

In the case of the army a large proportion of the wounds are due to the sharp-pointed, narrow bullets, many of which pass through the tissues and leave only small apertures of entrance and exit which scab over and seldom require any treatment for the wound itself. Occasionally, however, for various reasons, the wound of exit may be large, in which case sepsis may occur there. The round shrapnel bullets make larger orifices of entrance and exit than the rifle bullets and do not so often scab over, while if they fracture bones the injuries are much more severe. The wounds with portions of shell resemble those met with in naval warfare.

Now, the first thing which strikes everyone who is actively engaged at the present time in the treatment of the wounded, whether on land or sea, is the great prevalence of sepsis. Giving my own experience of naval cases, *all the wounds which I have yet come across have been septic*, some of them very badly so. I hear also that those who are working at the army base hospitals are having a large amount of sepsis in shell and shrapnel wounds, and in addition, at first at any rate, while our army was located towards the centre of the line, were having a good many cases of tetanus and acute spreading gangrene. So far we have not had tetanus in the naval wounded, and that is of course natural, for seeing that the tetanus bacillus reaches wounds from the soil it is only those wounded on land who would get their wounds contaminated with this organism. And, probably for the same reason, I have not met with a case of acute spreading gangrene.

It is a very serious matter that all the larger wounds which arrive at the base are septic. It is true that in some the sepsis is not so severe as to threaten the life of the patient, but it is no light thing for a wound to become septic. Once get sepsis into a wound, especially a compound fracture or a wound of a joint, and you have no certainty as to what the result may be. The patient may lose his life from one or other of the septic diseases, or his limb may have to be removed in order to save his life. His convalescence will be prolonged and may be interrupted by the occurrence of fresh abscesses, while he will suffer much pain. He may be left with serious deformities from the difficulty of replacing parts or of keeping them in proper position on account of the septic wound; and as the result of the extension of the inflammation and suppuration to the various parts in the neighbourhood, structures become matted together, and great disability may ensue.

REASONS FOR SEPTIC CONDITIONS OF WOUNDS.

It is now exactly 50 years ago since Lister formed the opinion that the cause of septic wound troubles was the entrance of bacteria into the wounds, and since he first put that idea to the test in a case of compound fracture. And in that case he saw for the first time in his experience a compound fracture following the course of a simple fracture and not undergoing suppuration. His earliest communication on the subject of the treatment of wounds dealt with compound fractures, most of them severe cases and much soiled, and he was able to record a number of aseptic results and to observe various phenomena, such as the organisation of blood clot, which only occur in an aseptic wound. During the rest of his active life he had to treat many compound fractures and other serious injuries, and with some exceptions, to which I shall presently refer, he obtained aseptic results.

You may well ask then, Why are we not having the same experience here to-day? Why are all the large wounds which reach us from the front in a septic condition? For this there are several reasons.

One very important point which affects this question of asepticity in these wounds is the length of time which may elapse after the injury before the patient comes under treatment. The conditions in the army and the navy are very different from those in civilian practice. In the latter the patient can generally be attended to within a very short time after the infliction of the injury, and can be transported quickly to his own home or to a public or private hospital, where the immediate and subsequent treatment can be at once carried out under the most favourable circumstances and without any further movement of the patient.

The Wounded in Army and Navy.

In the case of the army the wounded must lie where they fall, and cannot be attended to perhaps for many hours. Formerly, where there was not such a terrific hail of missiles over the field of battle, and where, perhaps, a greater feeling of humanity existed, and where also the distances

between the combatants were not so great, the Army Medical Corps went out with ambulance wagons and were engaged during the progress of the battle in ministering to the wounded and in picking them up and removing them to a region of comparative safety at a short distance away. The ambulance wagons and depôts for first aid were respected as far as possible by the combatants, and though the members of the Army Medical Corps exposed themselves to great dangers, still it was possible in many cases to commence the treatment of the wounded comparatively soon after the infliction of the wound; and, further, battles were over usually in a few hours. At the present time the condition of matters is quite different. In many instances it would be madness to attempt to pick up the wounded while the engagement is going on, not only on account of the tornado of missiles, but also because the combatants are often too far apart for the Red Cross badge on the arms of the men, or even on the wagon, to be recognisable, even if it were respected. Besides, the presence of the wagons and men wandering about the field might give important information as to the position of the combatants. The result is that the wounded often cannot be attended to for a long time; sometimes, indeed, we hear of 48 hours or longer having elapsed before they are collected, and in the meantime the wounds are becoming more and more infected. It is true that where a medical officer is present in the trenches he may be able to do a little, but only very little, in the way of treatment.

Again, when the wounded have been collected, they must nowadays be removed for a considerable distance, sometimes a good many miles, to the field or temporary hospital, and naturally, with enormous numbers of wounded, this transport cannot be carried out in a particularly expeditious or comfortable manner. Even at this field hospital the patient is not at rest; he can only remain there while those parts of the treatment that are most essential are carried out, and then he is sent on to the base. At the field hospital, however, the treatment of the wound itself can be carried out, at any rate in the more serious cases, but in a good many it is not till the patient reaches the base that full attention can be paid to the injuries caused by the missiles.

In the case of the navy the conditions are also very unfavourable. In the old days the wounded were carried down from the deck to the surgeon's quarters as soon as they fell, or very soon afterwards; nowadays the surgeons and non-combatants on a battleship are all kept below, and only those actively engaged in the fight are on deck, and consequently the wounded must lie where they fall till the battle is over, or at any rate till a lull in the fighting occurs. From the battleship the wounded are transhipped as soon as possible to the carrier or hospital ship, from which again they are transferred to the hospital at the base, but the treatment of the wounds can be commenced as soon as they get on board the carrier or hospital ship. So far the wounded have been sent back to the base in a destroyer or other quick war vessel, but this is very unfortunate for them, as a doctor is not, as a rule, carried on board a destroyer, and little or nothing can be done for them during the transit—at any rate, in the way of remedying sepsis. It seems to me that, wherever possible, a hospital ship should be in the neighbourhood of the action, and the badly wounded should be taken on board it as soon as possible, or, if this is not advisable, doctors, orderlies, and dressing materials should be transferred to the destroyer so that the treatment of the wounds may be commenced at once. The position of the hospital ship and the transference of the wounded are, of course, matters dependent on the military necessities of the case, but the commander should always have present in his mind the supreme importance of the immediate treatment of the wounds and the inadvisability of allowing several hours to elapse before they can be attended to. The point is not the speed with which the wounded can be got ashore; it is the earliest time that treatment can be commenced, and this, of course, can be begun at once on board ship if the necessary means are at hand, however slowly the vessel proceeds to the base. The naval wounded have therefore an advantage over the army, in that the wound is not so much soiled and can, as a rule, be attended to sooner; they have the disadvantage that the wounds as a whole are more severe.

Now, as I shall presently point out, the chances of rendering a wound aseptic are comparatively small after 24 hours, and practically *nil* after 48 hours; indeed, after that time I should not make any attempt to disinfect the wound. If, therefore, the case does not come under treatment within 24 hours I do not think that we can blame any surgeon or any system of treatment for the septicity of the wound. In spite, however, of the above disadvantages, a considerable number of cases do come under suitable conditions for treatment within the period of time that I have laid down, and that being the case, a certain proportion of these patients should reach the base with aseptic wounds.

Disinfection of Wounds.

This leads us to the question of the disinfection of the wound, a branch of wound treatment which I fear is but little taught in the schools. Lister's experience and practice in this matter are forgotten, if, indeed, they are now known. The omission really arises from the want of precision and the carelessness which are creeping into the treatment of wounds at the present time. I do not make this as a universal charge by any means. There are many surgeons who take the very greatest care, whose operations it is a pleasure to watch, and whose results are excellent. But there are many others who do not seem to have got a proper grip of the matter, and whose results leave much to be desired. They follow the fashion in having a well-finished operating theatre, in dressing themselves up in the most approved and elaborate fashion, and in having instruments and dressings sterilised; but they end there. They forget the ubiquity of bacteria, and that their instruments, gloves, &c., may lose their sterility during the course of the operation; they deride antiseptics. If suppuration occurs in the wound afterwards they ascribe it to all sorts of causes, such as the silk, catgut, migration of bacteria, gout, influenza, &c., rather than the real cause—viz., their own faulty manipulations; and their example is naturally followed by those whom they teach.

"*Asepsis*" *and* "*Sterilisation.*"

In one of my books I placed at the beginning as a motto the following sentence: "Suppuration in a wound made by a surgeon through unbroken skin is due to some error on the part of the surgeon." This gave great offence, but it is

absolutely true, and unless a man takes that view and searches his own procedures when things go wrong in order to see where the error was, I quite despair of his ever being a trustworthy aseptic surgeon. To exemplify the carelessness which is not uncommon in the treatment of wounds, I could entertain you for the rest of this meeting by telling you the quaint things which are done by those engaged in operations, and the constant opportunities which are afforded for the entrance of bacteria during an operation, and the crude ideas which are abroad as to "asepsis" and "sterilisation." Watch the course of one of these so-called aseptic operations from a bacteriological point of view and you will see all sorts of errors and omissions which pass unnoticed, and these have led to a large literature on stitch abscesses, bad catgut, migration of bacteria, and so on.

I saw an operation the other day; everything had been sterilised, a dry sterilised towel was spread out on a table, the boiled instruments were turned out on this towel, and were then arranged by a nurse who did not wear a mask. Something excited her attention, two other nurses came up, also unmasked, and the three became agitated, all bending over the instruments and talking at the same time; people were coming and going, and at least 20 minutes elapsed between the time that the instruments were turned out and the commencement of the operation. Were they still aseptic? And yet the surgeon comes in completely booted and spurred, innocently picks up a knife and goes on with the operation. Is it any wonder that that surgeon has a good deal to say about catgut, silk, and so-called stitch abscesses?

I am always very suspicious of so-called sterilised towels and swabs, especially in work in private. They are often placed in a sort of potato steamer for a few minutes, an apparatus which would take hours to cook a potato, and therefore if I do not know the nurses I always order the towels to be boiled in a pan for half an hour and not touched before I arrive. Well, in one case nurses were sent out from a large aseptic hospital who were said to be fully trained and most excellent. They received my instructions about the towels, and on my arrival I found a very small poky room with very few dishes in it (not the palatial apartments in which some of my more fortunate *confrères* are accustomed to operate). I looked about for my towels, but could see no trace of them. I therefore called the nurse and asked her for them. She lifted the lid of the commode and there were my aseptic towels reposing at the bottom of the night-stool—another source of coli infection of wounds which is worth remembering.

A fresh instrument is wanted during an operation, or an instrument falls on the floor. It is popped into some boiling water and presented to the surgeon "sterilised" within a minute! and so on. A surgeon is doing an intestinal anastomosis, clips away mucous membrane, rinses his scissors in some salt solution leaving the tags of mucous membrane and portions of fæces in the basin, and when his hands become sticky rinses them in the basin repeatedly during the course of the operation. When an abscess containing bacillus coli forms he is much interested and refers to the remarkable habit that coli bacilli have of wandering through the coats of the intestine in cases of intestinal anastomosis, separation of adhesions, &c. This pernicious habit of the bacillus coli seems to be particularly common in operations in the pelvis. It never seems to occur to the surgeon that he has introduced the sepsis during his operation and that migration of bacteria, if it occurs at all, only takes place through the inflamed wall of the intestine.

I think the man who annoys me most is the boiled water man! Some surgeons seem to take a particular pride in emphasising their contempt for antiseptics and the extreme simplicity of their methods. A surgeon comes to an operation and finds a dish containing some fluid. He asks what that is, and the nurse who has been carefully trained in real aseptic work says, in fear and trembling: "That is carbolic lotion for your instruments." It is most instructive to see the look of contempt on the surgeon's face as he says: "Carbolic lotion! Who on earth uses antiseptics nowadays? I thought that no one out of an asylum ever thought of them. Take it away and give me a bowl of boiled water." He does not disinfect his hands but trusts to the protection of boiled gloves, which, however, are soiled at the very beginning by being put on with unsterilised hands. He thinks that he is no end of a great man, and the unfortunate thing is that the nurses and students think so too and follow his fatal example. I wonder whether, if such a man had a son at the front at the present time, he would feel happy in the thought that the only thing which the surgeon had at hand for the treatment of wounds in war was a basin of boiled water! Faugh! The futility and littleness of it all make me sick.

Importance of the Bacteriological Problem.

The result of this slackness is that a good many men are being sent out from the schools every year who are not impressed with the bacteriological problem involved in the treatment of wounds, or who have come to believe that no such problem is involved, while they have become thoroughly impregnated with the idea that the use of antiseptics is an abomination, and that no surgeon who has any self-respect left or who is not in his dotage would ever think of using them. When they are confronted with soiled wounds, such as occur on the field of battle, they do not know what to do or how to proceed beyond painting the skin with iodine and covering the wound with a piece of gauze. The consequence is that the bacteria get a firm hold on the tissues before any means which might have been efficient in the first instance can be adopted. Hence the results which Lister obtained with compound fractures at the very beginning of his work 50 years ago, and which he continued to obtain subsequently, are not being met with in the present war.

The answer then to the question, why do practically all wounds in the present war become septic? is threefold: (1) because there is often long and unavoidable delay in collecting the wounded and commencing treatment; (2) because the wounds may be very large and complicated and almost impossible to disinfect thoroughly; and (3) because in a good many cases no attempt is made to disinfect these wounds, or if it is made it is utterly inefficient.

How, then, should the large open wounds which occur in warfare be treated? The treatment of these wounds may be considered under two headings according to the time at which they come under the notice of the surgeon—viz. (1) those which can be treated during the first 24 hours after their infliction: and (2) those which are only met

with at a later period, when sepsis and suppuration are already established.

I. TREATMENT OF WOUNDS WHICH COME UNDER THE SURGEON'S CARE WITHIN THE FIRST 24 HOURS AFTER THEIR INFLICTION.

Let us consider the condition of such a wound from a bacteriological point of view, and here I shall only speak of the larger wounds sometimes caused by bullets and wounds caused by fragments of shell or by shrapnel bullets. Wounds due to the modern small bullets, when they pass directly from one side of the body to the other without injuring bone or becoming deflected, are very small and sometimes difficult to find, and usually scab over and close without any further attention than a piece of dry dressing, unless some important internal structure has been injured.

Rapid Growth of Bacteria in Wounds.

With regard to the larger wounds they must, of course, be widely infected with bacteria at the time of their infliction, at any rate to a considerable depth; and not only is the wound infected at the moment of injury by the bacteria carried in from the skin and clothing by the fragment of shell, but it very rapidly becomes much more seriously infected by dirt from the clothing or from surrounding objects, and in the case of land warfare, by the soil of the place in which the wound is inflicted. These large wounds are consequently infected with all kinds of bacteria, not only with naked, easily killed organisms, but also with highly resistant spores, the latter being most common and most dangerous in wounds soiled with earth. These organisms are not only lying free in the cavity of the wound and thus apt to be washed away by the blood, but they are also adherent to the tissues which form the sides of the wound, if indeed they have not been actually driven into them. These bacteria, finding themselves in a highly nutritious soil and at a suitable temperature and with plenty of moisture, at once begin to sprout and multiply with great rapidity. I do not know how long it would take a spore to sprout in the first instance, but I do not suppose it would be any great length of time; but once they have sprouted, they multiply rapidly. Many organisms divide and double their numbers within 20 minutes. At that rate, it does not take long for a wound to be filled with myriads of organisms. Suppose we take it that each organism divides in half an hour, that would mean that each organism gives origin to 15 million at the end of 12 hours. Further, not only do these organisms multiply in the fluids which are free in the wound, but being in contact with weakened or dead tissues, the pathogenic varieties soon penetrate into the tissues and establish themselves there. Within the first 24 hours, therefore, we may take it that the state of matters is that the fluids in the wound are already teeming with actively growing bacteria, and that they have also penetrated into any pieces of dead tissue on the surface of the wound and to a slight extent into the living tissues forming the wall of the wound. Once they have penetrated into the tissues they establish themselves there and are extremely difficult to dislodge.

Eradication of Sepsis.

Now it is evident that the only efficient way of dealing with such a state of matters is to destroy these organisms which have entered the wound as soon as possible and before they have had time to grow and establish themselves firmly in the tissues, bearing in mind the fact that every hour that passes they quadruple their numbers at the very least. This will not be done by painting a little iodine over the skin around, or even by pushing it in among the blood, and by covering the wound with a piece of aseptic gauze; very much more careful and vigorous treatment is required than that. And it should be in the mind of every man who deals with these wounds that the ultimate results depend to a large extent on the prevention of sepsis; these results concerning not only the life of the patient, but also the rapidity and smoothness of his convalescence and his later condition.

As to the period of time during which it is advisable to attempt disinfection of the wound, my opinion is that it is only during the first 24 hours that it is at all likely that bacteria can be eradicated, and indeed after 12 hours the result is not at all certain. During the first 12 hours, however, the great majority of wounds, unless they are large and irregular or complicated with extensive comminution of bone, can be quite readily and immediately rendered aseptic, and if proper precautions are taken afterwards will remain aseptic, and thus the whole troubles resulting from the primary soiling of the wound will be avoided. Even up to 24 hours the infection can be rooted out in a considerable percentage of the cases. In the circumstances under consideration where wounds are soiled with earth, and where therefore there is considerable danger of tetanus and gangrene, I think that the period during which an attempt at disinfection should be made might be prolonged up to 48 hours. After that time the disinfection will certainly fail, and the attempt will do more harm than good by injuring the tissues which are opposing the invasion of the bacteria and thus enabling the infection to spread more easily and rapidly. Hence I would lay it down as an axiom of practice in the class of wounds under consideration that if the treatment can be carried out within the first 24 hours (and in the case of wounds soiled with earth 48 hours) an attempt should be made to kill the organisms which have entered the wound. These organisms can only be got rid of by means of chemical antiseptics. I fear that, try how you may, you cannot avoid their use.

Two points must be taken into consideration in making this attempt. The first point is, that we have not only to kill actively growing bacteria, but also the spores of bacilli, seeing that some of the latter class of organisms are highly pathogenic. For example, the tetanus bacilli and various other bacteria which cause pathogenic processes, such as some forms of gangrene, are spore bearing, and are thus extremely resistant to all destructive agents. Hence, the agents we use must be sufficiently potent to kill spores under whatever circumstance they are found, whether dry or in albuminous or oily materials. And the second point is that these spores must be killed quickly because one cannot keep such potent agents for any length of time in contact with the tissues, otherwise they may destroy them, and furthermore, these agents, if absorbed into the system, are all more or less poisonous.

Antiseptic Agents.

There are three potent antiseptics in common use at the present time—viz., carbolic acid, bichloride or biniodide of mercury, and iodine. Of these, we may exclude the mercurial salts, because although they kill microbes quite readily and in very considerable dilutions, if these

organisms are free or in a slightly albuminous fluid they are of no use when the organisms are present in albuminous or oily substances. In the case of the former, mercury combines immediately with the albumin, forming a compound which possesses very little antiseptic power; and as regards the latter, these salts do not dissolve in oil, and therefore organisms lying in oily material are not reached by the antiseptic. We are therefore left with the two substances, carbolic acid and iodine, and we must now consider these substances and determine which of them is best and most suitable and in what strength they should be used.

(*a*) *Carbolic acid.*—A saturated watery solution of carbolic acid (1 in 20) will kill naked, actively growing bacteria in a few seconds, but will not kill spores with certainty under from 12 to 15 hours, and this time will be still further prolonged if these spores are present in albuminous or oily material, because a certain amount of the antiseptic power of the carbolic acid is lost in combining with these substances. It is evident, therefore, that washing out the cavity of the wound with 1 in 20 carbolic lotion will not disinfect it if it contains the spores of pathogenic bacilli. On the other hand, liquefied carbolic acid will kill spores in a very few minutes—as soon, in fact, as it can soak into them. And therefore, if carbolic acid is to be employed in wounds soiled with material such as earth containing pathogenic spores, it must be used in the form of liquefied carbolic acid. Carbolic acid precipitates and combines with albumin, but the compound is still strongly antiseptic. It also dissolves readily and in large amount in oil, still retaining its antiseptic property, though not so strong as in watery solution. (1 in 10 oily solution is about equal antiseptically to 1 in 20 watery solution.) Hence the presence of oil does not protect the bacteria. This is the chief reason why I prefer carbolic acid for the disinfection of the skin rather than any other antiseptic, because it dissolves in the natural oil of the skin and so can extend its antiseptic action down the hair follicles and the orifices of the sebaceous glands. Further, carbolic acid is an anæsthetic, and its application causes very slight pain which subsides almost immediately.

(*b*) *Iodine.*—The antiseptic power of iodine is practically the same as that of carbolic acid, so that the 2 per cent. solution in common use is of about the same value as 1 in 50 carbolic lotion. What the effect of a 5 per cent. solution of iodine or of still stronger iodine would be on the tissues I do not know, but I fancy it would be intensely irritating, to say the least. Even with the 2 per cent. solution the skin must be dry before it is applied, otherwise it is very apt to be blistered, and the antiseptic properties of the iodine solution are said to be diminished. How it could be used in the field with the impossibility of drying the skin and keeping it dry I do not know, and I have been told that there have been several cases of iodine burns of the skin where this antiseptic had been employed.

Further, iodine causes great pain which lasts for a considerable time, as is well known in connexion with the iodine treatment of hydrocele. When I was a student the treatment of hydrocele was the injection of a strong solution of iodine, and the agonies which the patient suffered afterwards, and the pain and the inflammation which lasted for some days, was in very marked contrast to the painlessness and absence of inflammation which follow the injection of carbolic acid. Hence, although I may be thought not to be up-to-date, I still prefer carbolic acid to iodine, not only for the disinfection of the skin, but also, and more especially in the circumstances with which we are dealing—viz., as a means of destroying the bacteria which have already entered wounds before they come under the care of the surgeon. I am not, however, prepared to say that a sufficiently strong preparation of iodine might not possibly effect the same purpose, but in a few cases which I have seen in which iodine has been applied to the wound, it had not prevented the sepsis. Personally, if I had a wound I should insist on the use of carbolic acid in preference to iodine, both from the point of view of efficiency and of comfort.

Other antiseptics have been suggested, but none of them are sufficiently potent for the cases under consideration. Of these, peroxide of hydrogen seems to be a favourite abroad, but its antiseptic power is comparatively weak and it would be useless against spores.

Lister's First Work.

Before describing the details of the procedure to be adopted in disinfecting a wound let me recall Lister's first work and our subsequent experience. Lister's first attempt at aseptic work was by the use of a crude solution of carbolic acid called German creasote, so impure that at first he thought that carbolic acid was insoluble in water. For a time his experiments were only made on compound fractures, of which a large number, some of them very serious, occurred in Glasgow, where he was located at that time. His original plan was to introduce a piece of lint soaked in this crude carbolic acid into the wounds and thoroughly rub it into the recesses, and then to put in some more carbolic acid and stir it up with the blood so as to form a sort of paste which filled up the wound. Every day he painted a little carbolic acid over this coagulum, and in order to diminish the evaporation of the acid he covered the clot with a piece of block tin. Ordinary towels were then applied around to catch the discharge which soaked through; no other dressing was employed.

What was the result? All the cases followed an aseptic course so long as he continued the application of the carbolic acid; there was no temperature, no inflammation, no sloughs separating, no poisoning—in fact, none of the dreadful things which students are led to believe will result from the application of carbolic acid. No doubt in some cases where the carbolic acid was in contact for some time with the skin a small superficial slough formed which, however, was of no consequence. After a time, when he peeled off the superficial layer of the clot he found a healed, or almost healed, wound beneath. And as showing the absence of any injurious effects, it was in cases so treated that he first observed and demonstrated how blood clot if aseptic acts as a mould for the penetration of cells and for the formation of new tissue—what is now known as healing by blood clot. In some of his cases he discontinued the application of the carbolic acid after the deeper part of the wound had healed and when there was only a superficial sore, and as he had not devised any antiseptic dressing then he employed the ordinary dressings which he had previously been in the habit of using. Two or three of these cases showed septic troubles after the carbolic acid was left off, and, indeed, phagedæna occurred at

this late stage, thus affording additional proof of the protective effect of his new treatment. I would recommend those who hold up their hands in horror at the idea of applying liquid carbolic acid to infected wounds to read and digest Lister's early papers.

Development of System.

As he developed his system, and found that carbolic acid was soluble and active in oil and water, he modified his plans, and later his method was to wash out compound fractures thoroughly with 1 in 20 carbolic acid lotion, taking measures to see that all recesses of the wound were subjected to its action. With this second plan the majority of compound fractures also remained aseptic, but a certain proportion did not do so, these results differing therefore from those which he obtained in the early days with the crude carbolic acid; these failures chiefly occurred in wounds which were badly soiled. We now know the reason of this—viz., that the dirt may be so ground into the tissues that the carbolic solution does not penetrate it thoroughly, and further that the 1 in 20 solution does not kill pathogenic spores in a short time. This led us to remove all visibly soiled portions of soft tissues or bones and to apply liquid carbolic acid to these surfaces, using the 1 in 20 lotion for the rest of the wound, and this diminished the number of failures, and this is the plan I adopt in civilian practice. I believe that this plan would be quite satisfactory in the majority of wounds in war, but where they are very badly soiled with earth, as is so often the case at present, we should, I feel sure, revert to Lister's original plan in so far as to paint the whole surface of the wound with liquid carbolic acid, with the exception, perhaps, of narrow tracks in the deeper parts. Certainly this ought to be done in all cases of compound fracture.

In carrying out the disinfection of the interior of the wound not only must it be done methodically and thoroughly, and all the recesses of the wounds carefully attended to, but one must not forget that it is most important to disinfect the surrounding skin most carefully. It is useless to disinfect the interior of the wound and to leave bacteria on the skin free to multiply there and spread in and infect the wound again. I also think it is best to *begin* with the disinfection of the skin. Again, one great difficulty in obtaining proper disinfection of a wound is the constant flow of blood from the wound which dilutes and washes away the antiseptic, and steps must be taken as far as possible to arrest or control the hæmorrhage in the first instance; this is a very important point. It may also be necessary to open up the wound, not only in order to arrest the bleeding, but also to reach all the recesses of the wound for the purpose of disinfection. Further, the process is painful, and therefore I should advise that in all cases an anæsthetic should be administered.

Method of Disinfection of Wounds.

The procedure would be as follows. The patient having been placed under an anæsthetic, the first thing is to control the bleeding. In the case of an extremity a tourniquet is applied, but where the wound is situated in the trunk any visible bleeding points should be clamped and the wound temporarily stuffed with gauze or large sponges. The next step is to cleanse and disinfect the skin thoroughly. In the first place scrub it thoroughly with 1 in 20 carbolic lotion and ether soap, then shave it, and finally wash it thoroughly again with the carbolic lotion, leaving a cloth saturated with the lotion over the whole area, so as to continue the disinfecting action and protect the skin while the interior of the wound is being attended to. The interior of the wound must now be disinfected, and if it is necessary to gain access to the deeper parts in order to enable one to see what one is doing, which is very important, the wound must be enlarged by incisions made in suitable directions. The blood must be thoroughly swabbed out, the wound made as dry as possible, and the skin or fat or other structures which are visibly soiled with earth or dirt should be cut away. The wound being then held wide open by retractors, a piece of sponge dipped in the liquefied carbolic acid is carefully and thoroughly applied to the whole surface of the wound and to all the recesses, care being taken, by holding a swab in the other hand on the edge of the wound, to prevent the acid running over the skin. It is well to sponge out the wound after the first application, and then to apply the acid a second and even a third time if there is bad soiling. If at the bottom of the wound there is a long narrow track leading to the tissues, it may not be necessary to disinfect it along its whole length, because the probability is that the bullet or fragment of shell does not carry the organisms in to a very great depth. If it is a large wound which has to be soaked with the undiluted carbolic acid, it may be well, after about 5 to 10 minutes, to wash it out first with 1–20 carbolic lotion and then copiously with saline solution, so as to get rid of the excess of carbolic acid and thus reduce the chance of absorption.

Having completed the disinfection of the wound, the tourniquet is relaxed, the vessels tied, and a good-sized drainage-tube inserted down to the bottom of the wound, or even through a counter opening if there is any doubt as to the thoroughness of the disinfection. Any incisions made by the surgeon may be closed by stitches, but no attempt should be made to stitch up the original wound, unless possibly where flaps of skin have been turned to one side, in which case they may be brought roughly into position by two or three stitches. After the disinfection of the wound is complete it is well to give the skin around an additional wash with the carbolic lotion, in case it may have again become soiled from the wound.

In the case of a wound on the trunk or neck where no tourniquet is available, and where therefore the bleeding cannot be thoroughly checked, the disinfection is much more difficult and uncertain, because blood is constantly washing away and diluting the antiseptic. Hence the first thing to be done under these circumstances is to open up the wound and try to check the bleeding by clamping any bleeding points; these, however, must not be tied at this stage. The wound should then be firmly packed with gauze, so as to check the capillary oozing. Having done this, the skin around is cleansed and disinfected in the manner already described, and attention is then turned to the wound itself. The plug is then taken out and a smaller one substituted, so as to leave the skin and subcutaneous tissue exposed to view. The surfaces so exposed are then dealt with in the manner already described, badly soiled skin and fat being clipped away and the surface thoroughly soaked with the antiseptic. Further portions of the plug are then removed so that the whole surface of the wound may be disinfected

bit by bit; in addition it is well to irrigate it thoroughly with 1 in 20 carbolic lotion, and then, if large, with salt solution. Finally, the vessels are tied, and in doing so it is well in the first instance to take off the forceps one by one, daub the vessel with carbolic acid, catch it again with clean forceps, and then tie it. The rationale of this procedure is that the piece of tissue caught by the forceps has not been disinfected, and if it were tied at once a septic point and ligature would result.

In both cases after the disinfection is complete an antiseptic dressing (not merely an aseptic one) should be applied. The reason for using a dressing containing an antiseptic is that in the first place aseptic dressings are seldom available on the field of battle, and in the second place it may not be possible to change the dressing for some time, and if a non-antiseptic dressing is used the discharge passes through it and bacteria rapidly develop in it and reach the wound. On the other hand, a dressing containing an antiseptic which is soluble in the serum may give enough of the antiseptic to the serum to render it an unsuitable medium for the development of organisms, and thus, if the dressing cannot be changed early, an aseptic result may still be obtained. I believe that wool impregnated with salicylic acid is the best for this purpose, but it is well to put a piece of cyanide gauze (which is itself only feebly antiseptic) over the wound, so as to keep the salicylic acid from the skin.

It takes a long time to describe this matter, but it is perfectly simple, and I have adopted this method of dealing with compound fractures and other open wounds for years with a very large measure of success, and I should be very much ashamed if any considerable number of cases which came under my care within 12 hours after the accident did not follow an aseptic course. If iodine is preferred I cannot say what strength should be used, but it certainly ought to be much stronger than the ordinary 2 per cent. solution which is the favourite at present. The procedure would be the same as I have already described. If iodine is used instead of carbolic acid for the disinfection of the skin, it should not be applied directly over the dirty skin, and therefore, here also, the skin must be thoroughly washed and shaved and dried, first with a dry cloth and then with acetone. The trouble is that the skin will soon be wet again with the blood and serum when the wound is taken in hand, and not only is the disinfection imperfect, but the skin painted with iodine, if again wetted, is liable to be much irritated. I have not the slightest hesitation in saying that the disinfection will be much more thoroughly and satisfactorily done with carbolic acid, with less loss of time and also with less irritation of the skin.

Local Disinfection and Other Methods of Treatment.

The proper disinfection of a wound cannot be carried out in a hurry, and unfortunately in the army it will not be till the patient has arrived at the first field hospital, and in the navy, till the patient reaches the surgeon's quarters on the battleship or the hospital ship itself, that it can be taken in hand thoroughly. Whether anything can be done in the field or trenches which might help to delay or circumscribe the sepsis is a problem well worth considering. The first dressings with which the soldiers are provided are of no use except to prevent the entrance of further dirt, and the surgeon cannot be expected to carry with him the necessary arrangements for disinfecting the wound, though he might carry some antiseptics which might be introduced into the wound. Thus we have been trying at Chatham to make soluble bougies or suppositories, each containing 1½ grains of carbolic acid, which might be pushed into a wound before the emergency dressing is applied, or the surgeon might be provided with strong iodine solution, and pieces of gauze soaked in this solution might be pushed into the wound and left there. No thorough disinfection can, however, be carried out till the patient has reached some place (field hospital or sick bay) where he can rest for some time and where the methodical disinfection of the wound can be undertaken. As soon, however, as the patient has arrived at such a place the wound should be disinfected thoroughly, whether anything has been done previously or not. Even at the field hospital or sick bay it may not be possible to keep the patients long enough for all the wounds to be thoroughly disinfected, but at any rate all compound fractures and wounds of joints which do not require amputation and all wounds badly soiled with earth should be dealt with as far as possible.

At the present moment great stress is being laid on the particular kinds of organisms which may have entered the wounds, but very little is said about disinfecting the wounds. Instructions are being given, as regards the army, that immediately the patient comes under treatment he should have a subcutaneous injection of antitetanic serum and another of polyvalent antisepsis vaccine. Now I cannot speak with any authority as to the prophylactic value of antitetanic serum when injected into the subcutaneous tissues, but although *subcutaneous* injections of this serum are of no value in the treatment of tetanus once it has developed, those who have worked at the subject state that subcutaneous injection of the serum is of value if used immediately on the occurrence of infection. As regards antisepsis vaccine as a prophylactic, I am very sceptical indeed. It may possibly modify the severity of the impending sepsis, but I feel sure it cannot be depended on to prevent it. At the same time, we must not disregard any possible safeguard, and for the present I think it is well, in military surgery at any rate, to inject these substances in the manner which has been advised. I should not think that it is necessary in naval surgery to inject antitetanic serum.

I do hope, however, that those who have to treat these wounds will not take it into their heads that after making these injections they have done all, or indeed, anything of any real importance for the safety of the patient. I am very much afraid that some men will be satisfied with these injections, and will take no further local steps to render the wound aseptic, and will look on these injections as a way of avoiding the use of the much-hated chemical antiseptics. By all means use these injections, but never lose sight of the fact that the only trustworthy way of avoiding the septic diseases which inevitably follow these wounds is to kill the organisms before they have taken root in the body. Remember also that we have not to do only with one species of organism; we have to do with a great many, and even if the methods suggested were as effective as we could hope it leaves many other organisms untouched.

II.—Treatment of Wounds if more than 24 or possibly 48 Hours have Elapsed since the Infliction of the Wound.

It may happen that patients cannot be treated within the period above mentioned, and the question then arises whether any attempt should be made to disinfect the wound in the manner above described. By this time the organisms will, for the most part, have got a firm hold on the tissues, and any attempt to get rid of them by antiseptics will fail, and if the attempt fails at this stage it may cause a great deal of harm by injuring the actively granulating tissues. It may possibly be well still to clip away any visibly soiled tissues and touch the raw surfaces with liquid carbolic acid, but I think that any attempt at general disinfection of the wound would be a very injudicious and harmful procedure, and still more so if suppuration has begun. Indeed, I would go further and say that not only should strong antiseptics be avoided, but also even weaker ones. I usually find that surgeons get busy syringing out these early septic wounds with various antiseptic lotions, and not only on the first occasion but every time the dressing is changed, and I consider this to be very bad practice indeed.

The Relation of Antiseptics to Wounds.

In fact, my views on the relation of antiseptics to wounds are exactly the opposite to those in vogue at the present time. It may be that I am not up to date, but I fancy that I have perhaps been trained to take the treatment of wounds more seriously than most people, and to think and work a great deal at it. My own view is that if a wound is aseptic, while I do not willingly put antiseptics into it, their entrance will not interfere with healing at all so long as no bacteria have been let in by the surgeon. But on the other hand, if bacteria are already established in a wound, I think it is the worst treatment possible to meddle with it more than one can help, and more especially to syringe it out with antiseptics and to poke gauze and other things into it. The general practice at present is just the reverse—viz., to avoid antiseptics when the matter is of no consequence and when their use outside the wound may help to prevent the reinfection of instruments and materials used; and, on the other hand, to use them when the wounds are septic, when they cannot kill the bacteria, and when the only effect they can have is to damage the natural defences of the tissues. The chief antiseptic which I would use in septic wounds, and that only in foul-smelling ones, is peroxide of hydrogen, which, although a feeble antiseptic, certainly seems to overcome the fetor and does not irritate the tissues to any marked degree. If it is deemed advisable to wash out a septic wound, use normal saline solution as a rule, though very weak antiseptic lotions may do no noticeable harm, once granulation is fully established.

I believe that the chief reason for the present prejudice against antiseptics was the free use of these lotions formerly by surgeons who deluged their wounds with antiseptics, but took no care as regards disinfection of hands, skin, instruments, &c., and infected their wounds thereby, at the same time damaging the resisting power of the tissues by their antiseptics. The result was that the wounds did badly, but not, as they thought, as the direct effect of the antiseptic, but from the introduction of bacteria into the weakened wounds. They thought they were practising Listerism, and therefore gave it a bad name, but they were not following the master's teaching. I remember in the old days of the carbolic spray remarking to Lister more than once that while practically all our wounds healed aseptically, yet if a wound did go wrong with us, it went wrong worse than in the hands of septic surgeons. The reason was that the irritation of the spray diminished the local resisting power, and so enabled the organisms introduced to grow more readily; if no organisms were introduced this temporary diminution of local resisting power did not matter. It is curious how difficult it is to make people understand that carbolic acid or other antiseptic is not used as an application to a wound, but as an application to the bacteria outside the wound. The healthy tissues are sterile, as I was the first to demonstrate many years ago, and they need no antiseptic application to them; the enemy, the bacteria, come from without and should be killed outside the wound.

Drainage of Wounds.

As the wounds have come to us at the base hospital they are not only septic but they are often imperfectly drained. It is therefore necessary in most cases of large wounds, and especially where bones or joints are injured, to interfere with them by operative measures on their arrival at the hospital, but this should be done, as far as possible, once and for all. The patient having been put under an anæsthetic, the skin should be cleansed and disinfected in the manner previously described, and if there is any earth or gross dirt still visible about the wound the tissues involved should be cut or clipped away and the raw surface daubed with liquid carbolic acid. Apart from this, which is only occasionally necessary, the important point is to provide the freest possible escape for discharge, and in order to obtain this it is often necessary to enlarge the original openings and to make counter openings. Further, any foreign bodies which are readily accessible, such as clothing or fragments of shell retained in the wound, should be removed, but at this stage it is not advisable to open up fresh wounds in the deeper tissues in order to hunt for bullets or pieces of shell, for this is only to expose fresh tissues to infection unnecessarily before the body generally has developed its full resisting power.

As to the actual drainage of the wounds, that must be carried out by the use of as large drainage tubes as can be conveniently introduced, with holes of suitable size cut in their sides; where there are counter openings it is well to pass the tube through from one opening to the other. A most extraordinary practice has grown up of late—viz., instead of using open tubes, to introduce masses of gauze into the wound under the idea that they will drain away the pus. Even those who use tubes generally slit them open at one side and fill them with gauze. Now the object of drainage and dependent openings in these cases is to let the pus run away as soon as possible so that the products of bacteria shall not lie in the part and cause local irritation or be absorbed. To push gauze into a sinus is effectually to prevent the pus escaping freely; and the pus soaking into the gauze and lying there undergoes still further changes as the result of the bacteric growth, and becomes a highly poisonous and irritating substance. Whoever heard of stuffing a drain-pipe with gauze so as to let water run away, far less thicker material like pus?

I cannot conceive how this method of draining wounds ever arose; I fancy it was some aseptic surgeon who found that when he put a drainage tube into a wound the wound always suppurated, and the bright idea occurred to him that by using gauze instead he would keep bacteria out. However it arose, I regard it as one of the most foolish and mischievous things that have ever been introduced in connexion with the treatment of wounds, and especially of suppurating ones.

I may illustrate this by an anecdote. Some years ago I built a house in the country and we had some difficulty in getting a proper water-supply. At length I found a spring on the top of a hill in the neighbourhood where the earth had been somewhat hollowed out and which was used by a crofter not only for household purposes but also to water the animals. I got leave from the landlord to make a proper well there and to get the overflow for my own use. This I did, making a nice clean well for the crofter with an overflow to water the animals, and this left ample water for my house. The crofters are very conservative people, though they always vote for the Radical candidate, and this particular old lady had a great affection for the old well and resented very much the new one. To relieve her feelings she put all sorts of things—rotten fish, &c.—into the well. We did not notice this at first, and thought the water was extra good and tasty, but presently the flow of water through our pipe began to fail and ultimately stopped altogether. On examining the well the spring was all right, and there was nothing for it but to dig up the pipe. About a hundred yards from the well I found a piece of dirty linen, evidently a portion of the old lady's chemise, which was very rotten and completely prevented the flow of water. Now this is exactly what you do when you fill a drainage-tube with gauze; you prevent the free exit of the pus, and the gauze becomes very rotten and poisonous.

I do not think one can go too far in preventing the accumulation of septic material in a wound. Two of the very best cases which I have so far had have been cases of fracture of the pelvis with extensive tearing of the rectum. For a few days they were treated by drainage, a large tube through the anus, constant irrigation, &c., without any improvement, but as soon as I performed colotomy and cut off the access of fæces their improvement was immediate and most remarkable, and one of them has already healed and will soon be in a condition to have his colotomy opening closed.

Dressings.—Irrigation.

As regards dressings in these cases, of course aseptic dressings are not only useless but injurious. The septic discharge soaks into them and decomposes there, and the dressing simply becomes a septic poultice which poisons the wound. Antiseptic dressings are rather better, and in small wounds do well enough, the dressings I use being cyanide gauze next the wound with salicylic wool outside. But in large wounds the pus does not take up enough antiseptic to stop the decomposition entirely, and I am not at all satisfied with large masses of dressings over a wound. I believe that in these bad septic cases the less dressing you apply the better, and my experience is that as regards dressings it is best in these cases only to lay a few layers of antiseptic gauze over the wound to prevent it being soiled by the clothing or blankets, and to apply boracic fomentations and change them frequently. To pile on dressings on septic wounds, whether these dressings do or do not contain antiseptic substances, is only to revert to the old methods of two or three centuries ago which have been long since, and quite rightly, discarded. Wherever it is possible, however, in the case of large wounds and those involving bones or joints, constant irrigation with normal saline solution is by far the best method of treatment where circumstances allow of the employment of this plan. The irrigation is at first continued day and night, but after some time, as the discharge gets less and the wound begins to heal, boracic fomentations may be substituted during the night, but the irrigation should be continued during the day till healing is nearly complete. Where gangrenous processes set in, a water bath, frequently changed, with a little iodine or permanganate of potash in the water is the best treatment.

Removal of Missiles.

There is just one other point to which I shall refer—viz., the question of the removal of the missile which has done the damage. Of course, if it is present in the main wound, or is doing harm by pressure or otherwise, it should be removed at once; but not uncommonly fragments of shell or bullets pass into the tissues for a considerable distance from the main wound, and if left alone may become encapsuled and not do any harm and the wound of entrance will heal quite well. Such fragments can be removed by a separate incision later if necessary. I think that there is too great a tendency to hunt for small fragments of shell or bullets at the present time. It is interesting that when they traverse the tissues for some distance they seem to shed the septic material which they have carried in with them. I have one case where a piece of shell passed through the rectum and is embedded deeply in the other thigh and is not causing any irritation. It is well, however, to have a stereoscopic skiagram taken in all these cases as soon as the condition of the patient allows; this will help the surgeon to determine later if he should remove the fragment.

CONCLUSION.

Gentlemen, I am afraid I have taken up far too much of your time, but the question I have been referring to is one of tremendous importance, and I entreat you to give it your most earnest consideration. If you have followed what I have said, it is clear that I only advocate the use of antiseptics at the very commencement of the treatment, but at that time, in order to serve the purpose, they must be sufficiently powerful. I am much opposed to their use in suppurating wounds. Some object to the use of these strong antiseptics on the ground that they may cause a slough. This, however, is a mistake; used as I have advised they may kill a microscopic layer of the surface of the wound, but they cause no visible slough. Even if they did cause a slough, if you have destroyed the bacteria the slough is of no consequence; it will be absorbed like any other piece of dead tissue, and what does a slough matter as compared with the life and future usefulness of the patient? It is very trying for those of us who are parents to feel that any day we may hear of the death of our boys in battle. If they die on the field of battle, they at least die nobly in fighting for their country and for the safety of those they have left behind. Surely it makes it still harder for us to know that if they escape death on the field of battle they may still,

as the result of imperfect disinfection of the wounds, die from sepsis or be maimed for life. I beg of you to consider this matter calmly and logically and without prejudice, and see that every possible means is taken to avoid this great calamity.

SPLENOMEGALIC (HÆMOLYTIC) JAUNDICE ASSOCIATED WITH BILE PIGMENT IN THE URINE.

REPORT OF A CASE IN WHICH SPLENECTOMY WAS PERFORMED.

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THE term "acholuric jaundice" is the one which is usually employed to designate that class of case in which more or less persistent jaundice occurs in association with enlargement of the spleen and frequently with that of the liver also. The disease is now regarded as a clinical entity, but its nature requires further elucidation. The condition is most frequently congenital, but in some instances the onset apears not to commence until somewhat later in life. It is also familial in that more than one member of a family and successive generations may be affected. The syndrome comprises in addition to the jaundice and enlargement of the spleen and liver already referred to an anæmia, which is characterised by an increased fragility of the red corpuscles and a low colour index, together with coloured stools and urine containing urobilin but free from bilirubin. These characteristics of the urine have up to the present time been regarded as essential features of the disease, but I venture now to raise the question whether too much stress has not hitherto been laid upon the acholuria.

Such observers as Banti, Parkes Weber, and Poynton have noted the occurrence of bile pigment in the urine during exacerbations in cases of acholuric jaundice, and in Weber's case of persistent slight jaundice,[1] which will be referred to again later, Gmelin's reaction was frequently positive. It is also possible that bilirubin in small quantities may occur in the urine, although its presence cannot be detected. In such instances the characteristic reaction may be masked by other pigments which accompany it.

It thus appears that in some cases bile pigment is not uniformly absent from the urine. The case related below, however, affords a new aspect of the disease as regards the bilirubinuria in that the jaundice was always found to be accompanied by the presence of bile pigment in the urine and an absence of urobilin. The urine was examined on several occasions both before and after splenectomy, and at each examination this was found to be the case. It is, therefore, perhaps better to abandon the term "acholuric" as applied to these cases and to designate the disease as in the title to this paper from its chief symptoms—viz., jaundice, hæmolysis, and splenomegaly. Other names which have been given to the condition are also open to objection. Splenomegalic anæmia does not seem sufficiently distinctive, and further might be confounded with splenic anæmia. Hæmolytic splenomegaly conveys possibly the suggestion that the hæmolysis is due to the direct action of the enlarged spleen upon the blood, of which there is no certain evidence. The action of the spleen is probably by means of its internal secretion, which exerts an influence on the bone marrow tending to the production of red blood corpuscles deficient in their power of resisting hæmolysins; in this way the organ is indirectly the cause of the hæmolysis. The term "cholæmia," on the other hand, has the advantage of being short, but is somewhat indefinite. I would suggest, therefore, that the name "splenomegalic jaundice" (with perhaps the additional adjective "hæmolytic") be used for this disease, at all events until a clearer insight into its nature is obtained. It would at any rate avoid the confusion caused by the multiplicity of terms.

The case which I have to report is that of a girl, aged 6 years, who was born jaundiced. The icterus lasted for six weeks, but from that time until three months previously to being seen at the Prince of Wales's Hospital (May 26th, 1913) she was said to have been free and to have had good health. In February, 1913, there was a sudden recrudescence of the jaundice, and the child began to look anæmic and to lose flesh. Epistaxis occurred from time to time, but there were no other hæmorrhages. The stools were normally pigmented and the urine was of a deep colour. The patient was a well-grown girl who appeared somewhat anæmic and listless, but the most striking feature about her was a deep olive-green jaundice, the most intense that I have seen in a child. The spleen was enlarged, its lower pole being felt about halfway between the costal margin and the umbilicus, and the liver also was considerably increased in size. The stools were coloured, bile pigment was present in the urine, and a blood count showed a lymphocytosis. There was no history of a similar condition in the family or of syphilis, there being only an elder brother, who had always been healthy. The mother had had no miscarriages, and a month later gave birth to a healthy child with no signs of jaundice. The Wassermann reaction, moreover, was negative. Frequent attacks of epistaxis supervened, and at the end of a few weeks the jaundice was slightly less marked. The spleen, however, became more enlarged and extended nearly to the umbilical level; the liver edge also could be felt a little lower than at first. At the end of three months (September) the icterus was distinctly less and a slight rose colour could be seen in the cheeks. At the same time the urine was less pigmented with bile. The spleen was slightly larger, but the liver, which in July had reached below the level of the umbilicus in the right nipple line, had somewhat decreased in size. The motions, as at first, were always pigmented. The temperature when taken was slightly raised, varying between 99° and 99·8° F. Examinations of the blood showed a diminution in the number of red corpuscles, and in October they did not amount to half the original count. Some enlargement of the cervical and axillary lymphatic glands was now noticed, but the patient seemed to be holding her own in spite of the deterioration of the blood, and had gained 4¼ lb. in weight in less than four months. The jaundice by this time had still further diminished, but the urine continued to show the presence of bilirubin and was free from urobilin. The spleen continued to increase slowly in size, and by December it extended below the level of the umbilicus; the edge of the liver was then also lower again. The blood showed a further deterioration, and the fragility of the red corpuscles as tested with sodium chloride solutions was increased, hæmolysis occurring in a 0·55 per cent. solution of NaCl, but not in a 0·6 per cent. The patient continued to gain in weight, but a certain degree of jaundice persisted, and the general condition became more and more unsatisfactory in spite of treatment with arsenic, iron, and other tonics. By March, 1914, she had gained a further 4½ lb. in weight, but the blood count had fallen to below 1,000,000 red cells per c.mm., and

[1] Transactions of the Clinical Society of London, 1903, vol. xxxvi., p. 247. This case is a doubtful example of those under discussion, as no obvious alteration in the size of the liver or spleen could be made out. Dr. Weber informs me that the patient died nine months later in another hospital, but no necropsy was obtained.

the fragility was still more marked than normal. The spleen at this time was slightly bigger, but the liver edge had again receded somewhat. I therefore asked my colleague, Mr. H. W. Carson, to see the patient, and he agreed to remove the spleen.

On April 7th splenectomy was performed. The patient stood the operation well and at once began to improve. Her spirits rose, the jaundice disappeared, and a healthy colour soon returned to the cheeks. The temperature, which had been from 99° to 100° F., fell to normal by the end of a week, and in a fortnight a blood count showed an increase of over 3,000,000 red cells per c.mm., although the colour index was only slightly increased. The patient was sent to the convalescent home and returned in May to all appearance a healthy child, having regained the weight which she had lost as the result of the operation. A blood count, however, showed a diminution in the number of erythrocytes, but the colour index was higher. The liver remained the same size as in March. Subsequently the patient had some epistaxis, but continued in excellent health, and on July 13th the red cells had risen to 6,000,000 per c.mm. and showed a normal fragility. On July 24th, however, the patient was sick and out of sorts generally. Epistaxis occurred and the jaundice returned, the urine again becoming dark coloured. On the 27th she was peevish and not nearly so well. She had lost her colour and presented a degree of jaundice similar to that shown before her operation. She had also lost 4¾ lb. since her previous weighing on June 3rd. The tongue was coated and the temperature 99·4°. The blood showed only a slight decrease in the number of erythrocytes, but a distinct fall in the colour index; the fragility of the red cells was normal. The urine was again found to contain bile pigment, but no urobilin. Three days later the patient died at home. No necropsy was performed.

Table of Blood Examinations.

—	May 29th, 1913.	Oct. 16th.	Dec. 17th	March 13th, 1914.	April 23rd.	May 22nd.	July 13th.	July 29th.
Red corpuscles	4,824,000	2,360,000	1,800,000	994,000	4,224,000	3,080,000	6,000,000	5,500,000
White ,, ...	15,200	38,000	17,800	13,180	16,800	9,100	34,375	23,400
Polymorphonuclears ...	39 %	48 %	48 %	—	84 %	82 %	28 %	65 %
Small lymphocytes ...	53 %	28 %	39 %	—	11·3 %	12·2 %	20 %	14 %
Large ,, ...	6 %	4·7 %	4 %	—	0·3 %	1·2 %	30 %	2 %
Hyalines	—	—	—	—	—	—	8 %	1 %
Eosinophiles	2%	3·7 %	6 %	—	3·4 %	2·6 %	4 %	—
Myelocytes	—	13·3 %	3 %	—	—	—	8 %	—
Myeloblasts	—	—	—	—	—	—	—	13 %
Mast cells...	—	2·3 %	—	—	1 %	2 %	2 %	—
Hæmoglobin	—	—	25 %	—	60 %	55 %	100 %	70 %
Colour index	—	—	0·69	—	0·71	0·89	0·83	0·63
Hæmolysis	—	—	0·55-0·6 % NaCl.	0·5-0·55 % NaCl.	—	—	0·4-0·45 % NaCl.	0·4-0·45 % NaCl.

On Oct. 16th, 1913, several normoblasts were present. Splenectomy was performed on April 7th, 1914. The difference in the readings of subsequent dates should be noted.

The production of the jaundice in some of these cases is probably not entirely the result of blood destruction. In the case just related the very deep jaundice at the commencement was not associated with any marked decrease in the number of erythrocytes; indeed, they were at the time only just below 5,000,000 per c.mm., and it is to be remarked that the jaundice lessened coincidently with the diminution in the number of red cells. It would seem, therefore, that the jaundice is in some measure due to changes in the liver, but whether this occurs as a complication or as an essential part of the syndrome must for the present be left undecided. The fact that the liver in these cases is usually enlarged points to the presence of some coexisting abnormality in that organ, but the nature of the pathological changes which occur has not been accurately determined, though it has been noted in those instances in which the liver has been examined post mortem that no cirrhosis has been found. A participating factor in the production of the jaundice might thus be a cholangitis causing sufficient obstruction for a portion of the bile to find its way into the lymphatics and subsequently to appear in the urine, but not severe enough to prevent the escape of bile into the duodenum, thus allowing the stools to be coloured. It is possible that some degree of cholangitis exists in all these cases, and that the occasional presence of bilirubin in the urine is due to an increase of that condition. In the case related above it may be supposed that the initial deep jaundice was caused by a somewhat severe cholangitis which brought about an increase in the icteric tint produced by hæmolysis. With the diminution of the cholangitis the jaundice lessened, though a certain amount remained. After the operation, which appears to have exerted a temporary beneficial effect on the liver, a return of the cholangitis occurred, giving rise to further jaundice and possibly a toxæmia which resulted in the death of the patient.

A fatal termination to the case was very disappointing after the immediate brilliant effects of the splenectomy, and it is to be regretted that no necropsy was held to determine the condition of the smaller bile ducts. In this connexion it may be remarked that two cases of hæmolytic jaundice reported by Dawson[2] were associated with affections of the gall-bladder, one with gall stones and the other with cholecystitis; both of these at one time had bilirubinuria, but it was not constant. Banti also states[3] that when the anæmia is intense a small quantity of bilirubin may be present, and has reported one or two cases in which this was so, though it would now seem open to doubt whether the bile pigment was really due to an increase in the anæmia and not to an inflammatory condition of the smaller bile-ducts. The same author further remarks that under the same conditions a few myelocytes may be found in the blood. This was exemplified in my case.

So far as I am aware no case has hitherto been reported in which the presence of bilirubin and an absence of urobilin in the urine were persistent accompaniments of splenomegalic jaundice. The

[2] Proceedings of the Royal Society of Medicine, 1914, Clinical Section, pp. 101, 103.
[3] La Semaine Médicale, 1912, vol. xxxii., p. 265.

only one which I have found at all resembling it is Weber's case of persistent slight jaundice[4] already referred to, but in that case urobilin was definitely present on at least one occasion. Moreover, no enlargement of the spleen or liver could be detected, and for this reason it is doubtful whether it should be included in the same category.

The cause of the splenomegaly in these cases is unknown, but the influence exerted by the perverted internal secretion of the organ on the hæmolytic resistance of the erythrocytes is shown in the case here recorded. After splenectomy had been performed the red cells not only increased in number to a remarkable extent, but also regained their normal fragility, while the colour index showed a gradual improvement. Several observers, however, have found that there has been very little or no improvement in the fragility after the removal of the spleen, but observations, as a rule, have only been recorded for a brief period after operation. In a few cases, on the other hand, as in my own, the fragility has been diminished, but in some instances an improvement has not been noticed until some time after the operation.

A record of the subsequent histories of all these cases in which splenectomy is performed is very desirable. The operation, so far, has been fully justified by its results. Thursfield and Gow[5] have collected ten cases, with an additional two in which the diagnosis was doubtful. In all of these except one, in which death occurred from sepsis of the pedicle, the operation was followed by good results, and Banti even goes so far as to say that "in that group of hæmolytic jaundice in which splenomegaly represents the primitive and principal lesion surgical treatment succeeds in curing rapidly and rādically that jaundice which treated in another way would certainly have a fatal issue."

Remarks by Mr. H. W. CARSON.

The removal of the spleen in these cases is rarely a difficult operation. The spleen is large, firm, and generally fairly free from adhesions. There are three main rules, common, it is true, to all abdominal operations, which must be emphasised in the operation of splenectomy—namely, free exposure, delicate handling, and careful hæmostasis. Most of the difficulties can be avoided by making a free incision. This should be a vertical incision through the upper part of the left rectus, much the same as the incision for cholecystectomy on the right side. It should vary in length according to the size of the spleen, but will generally extend from the costal margin to the level of the umbilicus. After opening the abdomen, the presence of adhesions must be ascertained, and before anything else is attempted all adhesions must be cleared, not by breaking down, but by clean division after clamping. If the adhesions are broken down roughly, there may be a considerable amount of hæmorrhage the control of which may prolong the operation unduly. The spleen, freed from adhesions, is then lifted out of the abdomen and the pedicle tied. Occasionally the veins of the pedicle are very thin-walled, and care must be taken in lifting the spleen out of the abdomen that no strain is thrown on them. The pedicle is tied off with interlocking ligatures of thick catgut, reinforced by an additional ligature including the whole stump, and the spleen cut away. A careful examination of the cavity from which the spleen has been removed, including the under surface of the diaphragm, methodically done under a good light to detect the slightest hæmorrhage, completes the operation, and the abdomen is closed without drainage. The immediate result of the operation for the disease under consideration is, in the few cases recorded, very good. The dangers of the operation, shock, sepsis, and hæmorrhages, are all preventable, and this patient seemed to feel the operation very little. Whatever the exact physiological effects may be of removal of the spleen, clinically the improvement in this case was surprising. A fortnight after operation the child had lost her jaundice, and instead of being depressed and listless she had a good colour and seemed bright and active. The improvement was only temporary unfortunately, but immediately the operation had a very profound effect.

[4] Transactions of the Clinical Society of London, 1903, vol. xxxvi., p. 247.

[5] St. Bartholomew's Hospital Reports, vol. l., part 1.

PITYRIASIS ROSEA OF GIBERT.

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INSTANCES of a recurrence of the eruption of pityriasis rosea are so rare as to be worthy of record. In a survey of the literature of the disease, which was necessitated by the preparation of a paper read by me before the Dermatological Section of the Royal Society of Medicine in February last, I collected at the most six instances of recurrence, some of which were of doubtful authenticity.[1] The best observed and most precise of these was contributed by Szaboky[2] from Professor Nekam's clinic in Budapest, and as it offers a curious similarity to the case I am about to record I give his description in some detail as follows.

The patient, a male aged 19 years, was seen on Feb. 15th, 1899, when he had an eruption of pityriasis rosea distributed on the upper extremities, the sides and the nape of the neck. The eruption was slightly itchy, and disappeared under treatment within six weeks. Sweating was a prominent feature. In the beginning of April—that is, a few days after the complete removal of the first eruption—recurrence of a similar rash in the same positions as in the previous attack was noted. Sweating, which had diminished after the cure of the first eruption, increased during the new outbreak, which was cured in five weeks. Search for ringworm organisms proved negative. Cultures gave only sarcinæ and bacteria. Inoculations of scales into human beings gave no result.

In addition to this observation, which is the only one I have come across which has been recorded with any degree of precision, there is a very incomplete note by Allen[3] in the course of a discussion on pityriasis rosea, in which he observed that he had seen a patient who had had at least seven attacks, coinciding with periods of abstinence from alcohol, such abstinence appearing to cause disturbance of his digestive functions. These periods seemed to date from New Year resolutions of sobriety, imperfectly kept. Phillips[4] has a note of a curious case which seems to be rather an instance

[1] Transactions of the Dermatological Section of the Royal Society of Medicine, March, 1914.

[2] Szaboky: Monatshefte für Praktische Dermatologie, 1906, vol. xlii., p. 495.

[3] Allen: Journal of Cutaneous Diseases, New York, 1896, vol. xiv., p. 356.

[4] Phillips: Brit. Med. Jour., 1895, vol. i., p. 254.

of abnormal persistence of eruption than of recurrence, since no mention is made of intervals of freedom. The record is essentially as follows. When first seen, nine months previously, there had been circinate patches involving trunk, thighs, and arms. These had faded characteristically but had left irregular-shaped patches of eruption symmetrically placed at the sides of the neck, anterior and posterior folds of the axillæ, and over the prominences of the hips. The efflorescence was indolent, rose-brown in colour, dry, finely desquamative, and slightly raised above the surface of the skin, especially at the margins of the patches. Twice during the time that he was under observation the patient had had jaundice. Sherwell[5] makes a casual reference to a case in which he had noted recurrence of an eruption of pityriasis rosea during repeated pregnancies, but the record is too meagre to afford any information of value.

I now give the details of the case which prompts this note and which is the first instance of recurrence to come under my own notice. In my paper of February I tabulated 174 personal observations of the disease occurring in some 27,000 cases of general skin disease, and in none of these was recurrence observable.

The patient, a boy, aged 5½ years, was brought to see me at St. Mary's Hospital skin department on July 9th, 1914, by his mother. He showed a very typical and definite eruption of pityriasis rosea, distributed in the usual positions on the back and sides of the trunk. The mother said the eruption had begun a week previously with several patches which had preceded the general eruption by a few days, and which could be still identified as being larger, and therefore presumably older, than the rest of the rash. There was much itching, but no other affection of the skin except that there were a few small scars of a recent varicella and three much larger and older scars from a burn sustained in earlier childhood. Scales were examined for fungus with negative result, the diagnosis of "pityriasis rosea with several pioneer patches" was unhesitatingly recorded, and the patient was given a mixture of salicin and potassium citrate and no local remedy ordered. He was seen again by me on July 16th, when a saline aperient was added to his treatment, as he complained of constipation; the rash was unaltered at the second visit. Owing to the absence from London of the mother and the boy the patient was not again seen by me until Oct. 8th, but the history of events in the interval was very clearly given by the mother, who displays exceptional intelligence. She states that she was confined of her second child on July 30th—an event which explains the particularity of her recollection that a few days prior to that date the patient was sent to his paternal grandmother, living at Yarmouth; that before he left she, the mother, noted the state of the boy's skin carefully, as she was afraid the grandmother might have objections to receiving the child, and that when he was actually sent there were only faintly scaly marks with no remaining pinkness of tint which had particularly attracted her attention in the observation of the initial eruption. The grandmother, whose adverse reception of the child had been feared, made no comments, and the boy was returned to his mother's charge on August 10th, but was not critically inspected by her until about August 21st, when she specially noted that his body was perfectly clear of any trace of eruption. In the interval between the 10th and the 21st the boy had been bathed and looked after by his maternal grandmother, who failed also to note the presence of eruption. From August 21st to Sept. 20th the child was regularly bathed by his mother, and no eruption was seen until about the latter date, when a new eruption, exactly like the previous one, was noted on the back and front of the trunk, which took about four days to reach its full development, and was characterised by the same pink colour on which the mother had before laid stress. He was brought to me again, as I have mentioned, on Oct. 8th. On this date I noted a copious attack of typical pityriasis rosea, occupying the front and back of the body, with all the characteristics of the disease corresponding to the duration of the eruption (about 14 days) as given by the mother. There was not any itching with the second attack, but with this exception it was exactly similar to the earlier rash. Scales were again examined for fungus with a negative result, and he was again given a mixture of salicin and potassium citrate, without any local application. He was brought to me for examination on Oct. 12th and Oct. 19th, when the eruption was noted as progressively fainter in colour, and it had completely disappeared by Oct. 26th. He has remained clear up to the present date (Nov. 12th), when he has been discharged from attendance.

There is thus good evidence for stating that the first eruption persisted for five weeks, was followed by an interval of complete freedom of somewhat over a month, and that a second acute attack of the disease with characteristic inauguration and evolution of the eruption persisted for nearly five weeks, when it also disappeared under purely expectant treatment.

Wimpole-street, W.

[5] Sherwell: Journal of Cutaneous Diseases, New York, 1896, vol. xiv., p. 356.

TRAUMATIC RUPTURE OF THE LIVER; LAPAROTOMY; RECOVERY.

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CASES of rupture of the liver being uncommon, and the instances of recovery being still more so, I think it may be of interest to publish the notes of this case which came under observation in the Government Hospital, Kelantan.

On June 13th, at 10 A.M., a Tamil woman was admitted with the following history. At 9 o'clock on the preceding morning her husband had returned home drunk, and after bullying her for some time had pushed her through the window of their house into a drain four feet below. He then walked round and jumped on her many times, stamping on her chest and abdomen. Without assistance she was unable to leave the house that day, but in the evening her friends took her to make a report at the police station, and the next morning the officer in charge brought her across river in a native boat and to hospital in a rickisha. On arrival she was seen by the residency surgeon and myself, and the following signs and symptoms were noted. There were no external bruises or cuts. On inspection the abdomen was found to move fairly well; there was, however, marked distension below the umbilicus. On palpation the upper part proved

tender, especially over the right kidney. On percussion there was dulness in the flanks, more marked on the right side, and the distension noted above was resonant. The patient's general state was poor, the pulse being weak and rapid, but there was no rise of temperature.

At midday an exploratory laparotomy was made, and the upper part of the abdomen was found to be full of dark blood, which issued in large quantities. On passing the hand in and round over the surface of the liver a tear was found about 1½ to 2 inches in length by ¼ inch in depth on the outer surface of the right lobe. The residency surgeon after examination decided that nothing could be done since the wound was out of reach except to the hand, and the patient's state on the table was extremely critical. The abdominal incision was therefore closed up with three interrupted silkworm gut sutures through the peritoneum and all the layers. The patient was then moved back to bed as quickly as possible.

The after-treatment was practically *nil*, for on the day of the operation cholera broke out in the gaol and the hospital patients could only get very scant attention. The dresser, however, reported each day that the patient did not improve and that her pulse could hardly be felt, but on the fifth day I visited the ward and found her sitting up on her bed. From then onwards she improved daily, and 13 days after the operation she left the hospital, refusing to stay any longer.

The wound in the liver might have been packed with gauze to inhibit bleeding, but it was thought that binder pressure over the ribs would bring about the same result, and this seems to have been the case.

Kelantan, P.M.S.

MORPHOLOGICAL TYPES OF BACILLI AS AN ELEMENT IN PROGNOSIS IN PULMONARY TUBERCULOSIS.

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DURING the examination of samples of sputa from cases of varying type there is marked difference in the appearances shown by the acid-fast bacilli, though the greatest care has been taken to render the processes as identical as possible. In one case the bacilli are short, plump, and taking a uniform stain, with a noticeable absence of the clear spaces so frequently seen and which were once considered spores; in another specimen the bacilli are longer and thinner, the clear spaces numerous and well marked, the stain less deeply taken, and, excepting the acid-resisting properties common to the two, quite distinguishable from the first type. Again, we frequently meet with cases midway between the two. Spengler at one time attributed these differences to the human or bovine origin and considered the staining of the waxy envelope responsible for the difference in appearance of the strains of bacillus, but this explanation is not accepted by other authorities, nor is it substantiated by more recent investigation, for the report of the recent Royal Commission on Tuberculosis concludes that the microscopical appearances alone are insufficient to differentiate between the different types of bacillus. Muir and Ritchie in their "Manual of Bacteriology" on this point hold the view that there are the two different strains of organisms which on cultivation resemble in appearance the two types as described by Spengler and mentioned above, which vary in virulence and cultural characteristics. On the other hand is the view that the beaded type is a degenerate strain of that which stains homogeneously, and this view also finds able supporters.

At the International Congress in Brussels in 1910 the following results of experiment were recorded by Maher, of New Haven (Connecticut): "New growths of any strain—avian, human, or bovine—are consistently acid-fast and stain entire, and are of uniform size when grown on glycerine broth, glycerine agar, or glycerine potato broth. Old growths on glycerine broth grow long and filamentous, beaded and granular, say at six months, and partly lost their resistance to acids." In the same connexion Muir and Ritchie state: "We can only say that the younger bacilli stain uniformly and that in older forms inequality in staining is met with. This latter condition is, however, not found to be associated with greater powers of resistance." These observers, however, uphold the optical differences mentioned above as characteristic of the human and bovine bacilli respectively, but add that intermediate forms are met with, and that "in view of these facts it is probable that bovine bacilli will undergo corresponding modifications in tissues of the human subject."

Whether these differences in appearance are due to the fact that the one form is bovine, the other human (Spengler), or that they are respectively the young or old type of bacillus of either strain (Maher), which view is also favoured by myself, the difference has a distinct bearing on the prognosis of the case, and in examining sputum from a tuberculous case it is insufficient to detect the mere presence or absence of bacilli, but their morphological characteristics should be noted as to size, vacuolation, and acid-resisting properties. Variations in appearance of the bacilli coincide as a rule with the virulence of the attacking force, acuter and more florid cases harbouring bacilli corresponding to the young growths and the more chronic cases with fibrosis and old cavities being the hosts of the moniliform type. Either type (whether looked on as "old and young" or "human and bovine") may be conveyed to the lung by inhalation and may be the starting point of infection, and we may take as a prognostic axiom the "younger" the type the more virulent the case.

If certain cases are watched over a long period and the sputum systematically examined the type of bacillus is found steadily to approximate the vacuolated type, and two explanations may be suggested for this. The one explanation is that the bacillus is originally of bovine strain, but under the influence of environment it is gradually adapting itself to human surroundings and at the same time decreasing in virulence; or, secondly, that the original strain, whatever its origin, is losing ground against strong resistance, which view is more in accordance with present opinions cited above.

This leads to another aspect of the question—namely, whether the changes are due primarily to bacillary alteration or to varying resistance in the tissues of the individual infected, the resistance being either acquired or inherited, or to both. A

consideration of this aspect gives us four possibilities: (1) a virulent strain of bacillus and poor resistance; (2) a virulent strain of bacillus with good resistance; (3) a feeble strain of bacillus with poor resistance; and (4) a feeble strain of bacillus with good resistance. Whereas (1) leads to an acute rapid case of "galloping consumption" the course of (4) may probably lead to a permanent arrest before much damage is done to the tissues; (2) may lead to degeneration of the tissues and ultimate chronicity, a dangerous type of case from the preventive point of view, and (3) to a slowly smouldering progressive case, probably non-febrile but nevertheless going steadily downhill.

It follows that a knowledge of one's patient and careful inspection of the characters of the bacillus may be of considerable assistance in prognosing the course of a case, and as a result evidence as to the best method of treatment to advise the patient to pursue. Resistance is the predominant factor in influencing prognosis, and all efforts should be aimed at the production of high resisting power, as this is the factor under our control. Given good resistance, fortified by suitable treatment, and the type of bacillus will be found to deteriorate as stated above, while nature erects barriers of connective tissue to the progressive course of the disease, gains time for antibody formation which still further causes degeneration of bacilli, and by contraction of fibrous tissue lessens cavities and controls blood supply, although in rapidly fatal cases the end has arrived before the defensive mechanism has accomplished its work.

What is the ultimate fate of the degenerate bacilli in cases which successfully progress to chronicity? There is no doubt they ultimately disintegrate and that the portions retaining the stain have a dormant existence, and either under the synonyms of Much's granules or Spengler's "splitter" forms can recover vitality under suitable conditions of soil and temperature and become responsible for many cases of relapse or infection. These granular forms should be specially stained for either by Much's modified Gram method or by Spengler's "pikrin" method. Should they be present they are of great importance as proving the patient a carrier of tuberculosis and a public danger. From the prognostic point of view they are of good omen as showing high resisting powers.

In conclusion, I wish to point out that the microscopical type of bacillus considered periodically in conjunction with the general and local condition of the patient is of great assistance in prognosis, and also that the sputum of cases of chronic tuberculosis, asthma, bronchiectasis, and bronchitis should be specially examined for sporadic forms of bacilli, which, with a little extra care, may be recognised by appropriate staining methods, and which are a source of great danger to the public health and a frequently unrecognised focus of fresh infection.

King James-street, S.E.

ISOLATION HOSPITAL FOR SOUTH DEVON.—The Local Government Board recently suggested that a joint isolation hospital should be provided for Dartmouth, Totnes, Kingsbridge, and Salcombe, and a meeting was held at the Dartmouth Guildhall last week to consider the scheme. After some discussion a resolution was passed in favour of the proposal. It was also decided to ask the Local Government Board to send a representative to discuss the whole question, and to consider the advisability of appointing a whole-time medical officer of health for the joint district.

Medical Societies.

ROYAL SOCIETY OF MEDICINE.

SECTION OF LARYNGOLOGY.

Exhibition of Cases and Specimens.

A MEETING of this section was held on Nov. 6th, Dr. G. WILLIAM HILL, the President, being in the chair.

Mr. HERBERT TILLEY exhibited microscopic specimens from five cases of Aspergillosis of the Maxillary Antrum seen by him during the past ten years. All the patients were females, and the chief symptoms were sneezing, marked nasal obstruction, severe pain in the cheek, sometimes causing insomnia, slight purulent nasal discharge, and great œdema and opacity on transillumination. There had been difficulty in irrigating the sinuses because the material was semi-solid and of sticky consistency. He had experienced no difficulty in curing the cases by operations, and there had been no tendency to recurrence.—Mr. S. G. SHATTOCK remarked that at first he believed that the disease was a mucinoid endothelioma such as may be found in the abdominal cavity, but that later it seemed probable that it was caused by a mycelium differing from that of thrush, sporothrix, &c. No cultivations of the secretion had been made.—Mr. W. DOUGLAS HARMER referred to a similar case which he had reported in the Transactions which was proved by cultivations to have been caused by aspergillus fumigatus. In that case there had been great difficulty in curing the symptoms, and the most effective remedy seemed to be sodium iodide in large doses.—The PRESIDENT pointed out that iodides are often successful in curing actinomycosis.—Dr. D. R. PATERSON had seen aspergillus infections of the lacrymal sac, and thought that they might be grafted upon old suppuration.—In this connexion Mr. SHATTOCK pointed out that the lung may become secondarily infected with aspergillosis.

The PRESIDENT showed skiagrams of Frontal Sinuses operated on by Good's method. Watson-Williams's metal sounds were seen *in situ*. Good's bone files or rasps were exhibited. He remarked that this method was certainly capable of relieving troublesome symptoms and that the presence of fronto-ethmoidal cells was no contra-indication.—Dr. P. WATSON-WILLIAMS thought that one could not be too enthusiastic about the results obtained by Good's method, even if a free opening could be made. He referred to the possibility of making a perforation through the partition into the frontal sinus on the opposite side in cases where there was a large frontal cell on both sides.—Dr. DUNDAS GRANT considered that the rasp was extremely useful for endonasal treatment of the frontal sinus. He was glad to see that this method was becoming more popular.—Mr. TILLEY thought that a careful record should be kept of the cases in which a perforation had been made. He also referred to the cases where lotion syringed into one frontal cavity returned through the opposite side of the nose.

Dr. IRWIN MOORE showed a case of Abnormal Overgrowth of Nose (bulbous) in a child aged 9. He stated that the child was born with the condition simulating rhinophyma. On cutting into it it was found to consist of fine fibrous tissue with no definite capsule and adherent to the skin and cartilages. Treatment by diathermy was advised.

Dr. MOORE also showed a private patient of Sir StClair Thomson, a case of Stricture of the Œsophagus illustrating the benefits of Hill's tube. He stated that the patient had worn the tube for eight weeks, during which time he had become able to swallow liquids with little discomfort, was relieved of mucous secretion, had gained weight, was much more comfortable, and able to do his daily work.—The PRESIDENT pointed out that his tube was not so well tolerated in cases suffering from cancer of the cricoid region.

Dr. J. COUBRO POTTER exhibited sections from a case which had been referred for opinion by the section. The findings showed it to be a case of perithelioma of the nasopharynx.

Dr. DAN MCKENZIE showed a patient who developed an Abscess of the Frontal Lobe of the Brain, secondary to old-standing frontal sinus suppuration. The abscess was drained through the frontal cavity, and the patient made a good recovery.—Mr. C. A. B. HORSFORD drew attention to the difficulty

of making a diagnosis of an abscess in the frontal lobe. In many cases the pus found was extradural.—Dr. P. G. GOLDSMITH stated that a frontal abscess might give rise to no symptoms whatever.—Sir ST CLAIR THOMSON described a case in which the abscess in the brain was on the opposite side to the sinus.

Sir ST CLAIR THOMSON showed a patient, aged 69, whom he thought to be suffering from Early Epithelioma with free movement of the cord. He had suffered from hoarseness for six months. The whole of the left cord was replaced by a red, knobby, ulcerating infiltration. The cords moved well. The rest of the larynx was normal. No enlarged glands. Wassermann reaction negative. No evidence of tuberculosis. He proposed to treat the case by laryngo-fissure.—Sir FELIX SEMON thought that it might be some obscure infection, or even tuberculosis.

Mr. G. J. F. ELPHICK exhibited a Hæmostatic Guillotine with which he had found it possible completely to enucleate the tonsils with very little loss of blood.[1] It was based on Sluder's method, and had one cutting and one crushing blade which entered between the anterior faucial pillar and the tonsil. On being pushed home this blade remained locked. The protruding tonsil being caught with a light fixation forceps the cutting blade was pushed home between the tonsil and the crushing blade, and the tonsil was lifted out with the fixation forceps. The crushing blade might be left a few moments compressing the cut vessels.

Mr. H. LAMBERT LACK showed a patient whom he had treated for extensive Papilloma of the Trachea, and Dr. GRANT and the PRESIDENT said that they had seen similar cases.

Mr. HUNTER TOD showed two cases of Epithelioma of the Tonsil to illustrate the results obtained by diathermy.—The PRESIDENT and Mr. HARMER expressed the opinion that diathermy was preferable to the knife in all such cases With the former method excellent results could be obtained, and the dangers of operation had disappeared.

MEDICAL SOCIETY OF LONDON.

Discussion on Surgical Experiences of the Present War.

A MEETING of this society was held on Nov. 16th, Sir JOHN BLAND-SUTTON, the President, being in the chair.

Sir WATSON CHEYNE opened a discussion on Surgical Experiences of the Present War. His address is published in full on p. 1185.

Sir ALFRED KEOGH, Director-General A.M.S., said he was glad that the subject was being discussed, for any conclusions arrived at would influence the methods of treatment adopted. He was particularly desirous of hearing opinions as to the value of the prophylactic doses of antitetanic serum, and concerning the treatment of wounds from the beginning, and also when they were dealt with under hospital conditions.

Sir RICKMAN GODLEE said that he agreed with every word of Sir Watson Cheyne's address. Before long, he thought, someone would rediscover the principles on which Lord Lister had worked. He would like to know what attempts were being made to disinfect wounds as soon as the patients were admitted to the field hospitals. By way of emphasis, he said that Lord Lister had often remarked that if he ever wrote a book—which he never did—the motto would be the words of the Psalm, "My wounds stink and are corrupt because of my foolishness."

Mr. ARTHUR EDMUNDS said that it was of course difficult at this stage of the war to generalise from a limited experience, especially as the cases which reached England were to a certain extent selected, the most severe and the most trivial remaining on the other side of the Channel, either because they could not be moved or because they were able to return to duty within a few days. Probably the cases seen in England could be fairly taken as those of medium severity. A great deal was being written about the *morale* of the navy and army. Certainly there was no place where this was more apparent than in the naval and military hospitals of this country; indeed, the extreme fortitude with which the most serious injuries were borne sometimes deceived the surgeon as to their extent. For example, a patient under his care was admitted with a swollen arm and a penetrating wound in the region of the elbow-joint. He complained of no pain, and accordingly was not put among the first batch to be sent down to the overworked radiographer. In due course a radiogram was obtained which showed extreme comminution of the bones entering into the joint. Neurcses were, however, met with, but in these cases the shock or strain had always been of the very severest character, at any rate in the cases which had come under his own personal observation. For example, a marine during the Antwerp expedition was overwhelmed by the collapse of a trench in which he was placed at Lierre. Several shells burst near him, one of which blew a comrade standing close to him to pieces. The patient regained consciousness two days later, but was completely deaf and dumb. He was at first thought to be mentally affected. His ears were full of wax, and Mr. Edmunds therefore took him into the aural department of the hospital so that he might remove the wax and examine his drums. During the process of syringing his ears a few bubbles of air entered the meatus and he obviously heard them. In a few moments with the aid of a little suggestion he could hear perfectly. Mr. Edmunds now attempted to make him utter a sound; this he did with difficulty, but was able shortly afterwards to make simple vowel sounds. He then suddenly asked him his name, and he answered clearly and correctly, exclaiming, "I can speak." He returned to duty two or three days afterwards perfectly well. Another marine, an officer, as the result of mental strain and sleeplessness, suffered from diplopia, but this also disappeared after a few days' rest. Another patient who had been shot through the angle of the lower jaw, the bullet lacerating the muscles at the base of the tongue, also complained that he was dumb, and made known his wants by writing them down. He wrote: "I cannot speak or swallow and my mouth is full of dirt." He was given something to drink and told he could speak. He reacted to the suggestion and had been able to speak, although with some difficulty, ever since. Mr. Edmunds was inclined to consider that the strain was more severe in the case of the navy, although he had no statistics to support this; the waiting to fight, and the ever-present danger from mines and submarines being more trying than the hardships of an active campaign on land. As regards actual wounds the present war had not yielded great surprises. It was, however, interesting to compare the wounds caused by the small fragments of shell which they saw at Chatham with the wounds from rifle and shrapnel fire which they had seen at Plymouth. Apparently the shells used by the enemy in the battle of the Heligoland Bight broke into small fragments which inflicted wounds very much like ordinary bullet wounds. A peculiarity of the German rifle bullet was the facility with which it turned right over; for example, he removed a bullet from a man's buttock which had entered over the sacrum about six inches away. The bullet was lying just beneath the skin with its point turned towards the wound of entry. In this case there was no great laceration of tissues, the wound consisting simply of a bullet track, and he was inclined to think that the bullet had completely turned round before striking, the trivial nature of the injury proving that the bullet was nearly spent. In the simpler wounds the bullet seemed to have passed directly through the tissues, making a small wound of entry and a slightly larger wound of exit, lacerating the intervening tissues very little. This was in marked contrast to the wounds which they saw as the result of the Heligoland fight, inasmuch as in the latter several cases had small wounds of entrance and exit but considerable laceration of the muscles. The probable explanation was that the more trivial bullet wounds were caused by a projectile rotating simply about its long axis, whereas in the naval action the wounds were caused by a fragment of shell moving with considerably less velocity but rotating rapidly around a transverse axis, forming a sort of flying circular saw. The importance of this was that a simple penetrating bullet wound of the soft tissues usually healed extremely readily, almost without suppuration, and beyond disinfection of the skin and the application of a dressing to the wounds of entrance and exit no treatment was necessary. In shell wounds, on the other hand, there was usually a deep cavity containing blood and lacerated tissue which was pretty certain to suppurate, and therefore such wounds should be explored under an anæsthetic and a good-sized drainage-tube inserted. The severer

[1] THE LANCET, July 18th, 1914, p 168.

wounds caused by rifle bullets were possibly also to be explained on the theory of the rotation of a bullet about a transverse axis; some of these were superficial gashes which looked as if the skin had been struck by the side of the bullet; in others the extensive wound was probably produced by the high velocity of the projectile; thus in one case a man had a small wound of entrance on the back of the forearm and a wound of exit on the front of the forearm which was a deep chasm of about 4 in. by 2 in., the skin being split as if cut with a knife. He had seen one case in which this almost explosive action of the bullet was well exemplified, the patient being shot through the head of the tibia at about 100 yards range. It might be expected that the soft bone in this situation would be merely penetrated by the bullet, but as a matter of fact it was intensely comminuted, the interior of the bone feeling like a mass of sharp pebbles. In this case he was compelled to amputate the leg on account of the septic condition of the wound and the serious constitutional disturbance. The joint was uninjured, and he believed it might have been possible to save the limb had the patient been in better condition, but he had lain on the field for four days, having nothing to eat but mangel-wurzels, and nothing to quench his thirst but the dew which he could suck off the leaves. He had a small wound on the other leg from which Mr. Edmunds removed a fragment of leaf. He said that this patient's condition was exceptional, the bulk of the men being in excellent condition, and some of them having been wounded only 48 hours previously. As regards treatment in base hospitals in this country the essential point seemed to be to provide free drainage except in the cases which he had already referred to of simple petetrating rifle wounds; every case of a more severe nature had been complicated by a considerable amount of suppuration and sloughing. It would be unfair for those who were working in well-equipped hospitals in England to criticise those who were working at high pressure and often actually under fire abroad, but he would suggest that a more vigorous disinfection of recent wounds might ameliorate a good deal of this sepsis, and he believed that the use of pure carbolic acid should be more frequently adopted. He had had under his immediate notice two cases of extensive wound of the foot, involving the metatarsal bones of the great toe and the adjacent toes. The first of these he opened up, cleared out some loose fragments of bone, sponged the whole wound out with pure carbolic acid, and after putting in one or two drainage-tubes applied a dressing of cyanide gauze wrung out in 1 in 4000 perchloride of mercury. This wound was so severe that he was at first inclined to perform a partial amputation of the foot, and only refrained from doing so as the patient had already had the other leg amputated. This man healed up with healthy granulation, with no exfoliation of bone, and had already got a useful foot. In the other case the patient came under his care at a somewhat later date, but had been dressed within an hour of receiving his injury. The condition of his wound was approximately the same. Mr. Edmunds had treated him by a continuous bath and fomentations, the bath consisting of a tincture of iodine, 1 drachm to the pint. In spite of this there was some spread of the suppuration, the edges of the wound sloughed, and there were several of the pieces of bare bone exposed which must come away before the wound could heal. The difference between the progress of the two cases had been very striking, and was due, he believed, to the more vigorous disinfection which the first man received. The dangers of pure carbolic acid had been, he believed, exaggerated. It must, of course, be applied with discretion and not allowed to run over the skin; its application was for the moment painful, but not more so than tincture of iodine, and in any case it was usually necessary to give an anæsthetic in order to cleanse these cases efficiently. He believed that if in those cases in which there was a lacerated wound, especially one involving bone, it was possible to administer an anæsthetic and scrub the limb thoroughly with soap and 1 in 20 carbolic, cutting and cleaning the nails in wounds of the hand or foot, and then sponging the wound out with pure carbolic acid, very satisfactory results could be obtained. Anæsthetics were, of course, frequently out of the question, and therefore such methods of treatment were not practicable, but he believed that, wherever possible, this thorough disinfection should be carried out. Its utility after two or three days was doubtful, and in these cases it was probably wiser to trust to free drainage and antiseptic dressings, baths, and constant irrigation. In comminuted wounds of joints, where the joint was practically a bag of bones, an excision of the joint might be necessary to provide proper drainage. Another point in treatment was that of the advisability of removing bullets. These could be readily located by the X rays, and their removal did not, as a rule, present any very great difficulty. Shrapnel bullets were perhaps more difficult to find than rifle bullets, especially when they were embedded in muscle; not infrequently the bullet was found to lie in a small bag of pus, even when the wound of entry was completely healed, but very often the wound remained aseptic. In one case a man was shot in the shoulder through the deltoid, the bullet penetrating the thorax, wounding the lung, and coming to rest upon the diaphragm. There were pneumothorax and surgical emphysema over the pectoral and scapular regions, yet in spite of this the man had no symptoms and the bullet was allowed to remain. The possibility of deep suppuration was a reason for removing bullets wherever they were readily accessible; this should never be attempted unless the situation of the bullet could be determined by X ray localisation or other means. The telephone probe was a simple instrument and deserved to be extensively used, especially in the case of shell wounds, in which it was very difficult to distinguish a fragment of shell from the sharp end of a bone. In cases of difficulty—for example, when the bullet was embedded among the muscles of the thigh or buttock—it was a valuable plan to perform the operation upon the X ray couch. An incision was made over the approximate site of the bullet, through the deep fascia; a pair of Spencer Wells forceps was then thrust into the wound, a sterilised towel thrown over the wound and the operator's hands, and the fluorescent screen held over the limb. It was then often possible to seize the bullet and either withdraw it or fix it so that it could be removed with but little further dissection. They had employed antitetanic serum freely with no bad results, and he thought, therefore, that this valuable prophylactic might well be given as a matter of routine. To reserve it for the more severe cases was, he thought, illogical, as it was impossible to determine which cases had been infected with tetanus, and the risk from a small septic wound was not appreciably less than that from severest laceration. As a result of the disaster to the *Amphion* they saw a very curious type of burn from exploding cordite. This was very extensive but extremely superficial, with sharp borders where the clothing protected the part. These healed rapidly and without contracture, the resulting skin resembling an old X ray burn. In conclusion, he would like to mention the excellent results which had followed two operations performed at sea on the hospital ship *China*. One of these was a case of depressed fracture with hemiplegia, which was trephined by Mr. Fedde Fedden; the wound had now healed and the patient completely recovered. Another case was an amputation for an acute emphysematous gangrene of the arm, which had also healed and made an excellent recovery. The success of these two cases was of itself almost sufficient reward for the care and money which had been expended in the equipment of this ship, under the command of Fleet-Surgeon Bolster, R.N.

Sir FREDERIC EVE said that among the wounded they encountered degrees of septic infection rarely, if ever, seen in civil life. These were, of course, chiefly after shell and shrapnel wounds. In some instances of persistent suppuration examined bacteriologically cultures had always shown streptococci, and in one case B. pyocyaneus. Gas abscesses, probably from B. aerogenes, also occurred in limbs. Needless to say, frequent irrigation with antiseptics, antiseptic baths, &c., were necessary for septic cases. For baths he used a 1 in 10,000 solution of biniodide of Hg. Owing to fighting taking place largely in trenches wounds of the upper extremities, especially of the hands, were very common. There were also many rifle bullet wounds about the root of the neck and shoulders. In these concussion paralyses of a transient character were observed, from the bullet passing in contact with the cords of the brachial plexus. In one case of rifle bullet wound in this region the missile entered on the left side of the neck, paralysing the left recurrent laryngeal nerve, traversed the neck,

and emerged behind the right shoulder, without apparently injuring any other important structure. Concussion paralysis of the central nervous system was of interest because it was not seen in civil practice. He quoted a case in which a shrapnel bullet lodged over the junction of the right laminæ of the twelfth dorsal and first lumbar vertebræ, causing complete paraplegia with the exception of the retention of sensation to light touch over the left lower extremity except the foot. The laminæ were not fractured. Nine weeks after the injury power of voluntary micturition was regained, but there was otherwise very little improvement. Time only would show what amount of repair would take place. The experiences of the South African war showed that, in some of these injuries by concussion alone, there was found after three weeks degeneration of the grey matter of the anterior and posterior cornua, whilst in six weeks to two months the cord was converted into a custard-like mass. A somewhat similar injury to the cortex of the brain appeared to have occurred in a shrapnel bullet wound over the left parieto-occipital region, causing right hemiplegia and hemianopsia. At an operation performed abroad a stellate fracture of the skull was exposed, but no depression or injury to the dura. Rapid improvement took place, but nine weeks after the injury there were still weakness of the right side of the face, right arm and leg, profound loss of sensation on the right side, and right hemianopsia with partial mixed aphasia. Skiagrams of two cases of explosive fracture of the femur were shown. In one, union took place in five weeks with only half an inch shortening. Skiagrams of three cases of fracture from projectiles of the lesser trochanter were shown. In all, the missiles—a piece of shell and rifle bullets respectively—were allowed to remain *in situ* and the wounds healed readily, the foreign bodies causing no inconvenience. In two of the cases there was ultimately only 1¼ inch shortening. All the cases of fracture of the femur were treated with Hodgen's splint. Three cases of suppuration of the knee, elbow, and ankle joints treated by incisions, drainage, and irrigation did well. Having treated seven cases of wound of the chest with involvement of the lung, he had been impressed by the small amount of inconvenience produced by a considerable effusion of blood into the pleura, sometimes associated with pneumothorax. For example, an officer received a rifle-bullet wound of the shoulder, which traversed the upper part of the pleura and injured the lung. Skiagraphy and auscultation showed the existence of pneumothorax with hæmothorax as high as the angle of the scapula. No vesicular breath sounds but only distant bronchial breathing were heard. This patient suffered no inconvenience except some shortness of breath while he was proceeding on foot to the dressing station—a distance of half a mile. There was a fair amount of hæmoptysis on the first day, and slight for the three following days. The speaker had only had one case of tetanus which originated from a very slight and aseptic wound of the leg caused by a small piece of shell which was embedded in the tibia.

SECOND INTERNATIONAL EUGENICS CONGRESS.—It had been decided to hold the Second International Eugenics Congress in New York in September, 1915, but the committee now find it impossible on account of the war to arrange for it to be held at that date. The First International Eugenics Congress was inaugurated under the presidency of Major Leonard Darwin in London from July 24th to 30th, 1912.

ENTERIC FEVER AT ST. BURYAN.—As already recorded in our columns, there has been recently an outbreak of enteric fever at St. Buryan, Cornwall, 50 cases having been notified with six deaths, and there appears to be a considerable amount of dissatisfaction that the epidemic had not been more promptly dealt with at the outset. This opinion was expressed at the last meeting of the Cornwall county council, and the Hon. John Boscawen said he could not suggest a remedy unless it was that whole-time medical officers of health should be appointed for each district. A member proposed as a protest that the salaries of the responsible officials should be reduced by the amount of the county council contributions, and that a recommendation to that effect be sent to the Local Government Board. This was carried with one dissentient.

Reviews and Notices of Books.

A Text-book of Military Hygiene and Sanitation.

By FRANK R. KEEFER, M.D., Lieutenant-Colonel, Medical Corps, United States Army. Illustrated. London and Philadelphia: W. B. Saunders Company. 1914. Pp. 305. Price 6*s.* 6*d.* net.

THIS little book, by the professor of military hygiene in the United States Military Academy at West Point, is evidently intended as an elementary introduction to the study of the subject for the use of combatant officers. The subject is clearly treated in a popular manner. The first four chapters give sound advice on the care of troops, recruits and recruiting, personal hygiene, and physical training. The limits of age for recruits in the United States army are 18 and 35 years; the author, from a physiological standpoint, would make 22 the minimum age. Preventable diseases are next dealt with. Antityphoid inoculation is strongly commended. In both army and navy it is now compulsory for all officers and men under 45 years of age who have not had the disease. A few words are said as to the causation of the various specific fevers, but no directions are given as to preventive measures, and it cannot be said that the pages dealing with this part of the subject are of much value. With regard to cholera, for instance, something might have been said, easily intelligible to a non-medical person, as to commonsense measures of prevention. Heatstroke is mentioned, but hardly anything is said as to its causation or how to prevent it. With regard to wool as a material for clothing, its property of heat conservation "makes it most valuable in cold climates, and even in hot ones it is not altogether undesirable." This is indeed a very mild way of putting it. The section on soldiers' boots (or shoes) is excellent, as is the chapter on water-supply. Various methods of sterilisation are described, and boiling is considered to be "the safest, simplest, and most uniformly available." Stress is also laid on the necessity for careful inspection of the source and surroundings of a water-supply, as being the best guide as to its purity. One or two expressions might be corrected; the term protozoa is not applied to the lowest "class" in the animal kingdom (p. 61); neither is it correct to call anopheles "a variety of mosquito which has rather numerous species" (p. 74). The chapter on the use of alcohol is strongly worded, and yet the question is discussed temperately; the author's general conclusion is that "under normal physical conditions alcohol is never necessary, and is usually undesirable."

Genito-urinary Diseases and Syphilis.

By EDGAR G. BALLINGER, M.D., Adjunct Clinical Professor of Genito-urinary Diseases, Atlanta Medical College, &c., assisted by OMAR F. ELDER, M.D. *The Wassermann Reaction.* By J. EDGAR PAULLIN, M.D. Second edition, with 109 illustrations. London: Butterworth and Co. 1914. Pp. 529. Price 16*s.* net.

MUCH progress has been made in the branch of surgery treated in this volume since the first edition appeared, and care has been taken in this issue to include all of the many advances which have taken place. Thus the modern treatment of gonorrhœa is described, the value of vaccine therapy is discussed, and the phthalein test of the functional activity

of the kidneys is given fully and stress is laid on its importance. Sections are also devoted to pyelography, the spirochæta pallida, and to salvarsan and neosalvarsan. A special chapter on the Wassermann test has been contributed by Dr. Paullin, who has succeeded in rendering this important test as simple as its natural complexity allows.

Les Universités Allemandes au XXe Siècle.

Par Dr. RENÉ CRUCHET. Paris: Armand Colin. 1914. Pp. 450. Price 4 francs.

THIS book, which was published before the war began, contains many sidelights of special interest at this time. Dr. Cruchet has made investigations during a period of some 14 years into the 20 universities which Germany possesses at the present day, and has embodied the results of his studies in a very interesting book. He began with Bonn, which he visited for the first time in 1900. At Bonn the medical faculty is of less importance than the faculties of theology, law, and philosophy, but the general impression that the place gave to Dr. Cruchet was military. "If," he says, "pacific ideas are spreading among the younger generation of Germany, they must not be looked for in Bonn, where you can almost smell the powder." He revisited Bonn in 1909 and went over the new hospital under the guidance of Professor Siegert, a celebrated physician and accomplished linguist. Dr. Cruchet describes how the learned professor's conversation drifted from purely medical matters into a discussion of the relations between Germany, France, and England; how he pointed out that Germany's one idea was to be friends with France, that England was the real enemy, and Italy untrustworthy. Dr. Cruchet goes on to say that this conversation is an excellent picture of the actual state of feeling at the universities in general, where ideas of blatant pangermanism (*pangermanisme outrancier*) are daily gaining ground. It appeared to him that the offer of friendship towards France was really only an engine of war directed against England. Although all sections of Germans talk about peace, continues Dr. Cruchet, "when even medical men, on the subject of peace, use such language as I have recorded, one cannot help feeling a little dubious."

We need not follow Dr. Cruchet on his pilgrimage to all the 19 other universities, but his visits to Berlin, Leipzig, Jena, and Strasbourg seem particularly interesting. Berlin as a city did not appeal to him, but he was struck by the great improvements in hospital accommodation which had taken place between 1902 and the present day, and, above all, by the Empress Frederic's Post-Graduate Institute, which was opened in 1906.

At Leipzig he found much to admire in the various clinical buildings of the university, but he notes that the physicians and surgeons have an enormous number of patients to look after. Thus Trendelenburg had 400 beds and Curschmann no less than 700. Dr. Cruchet relates a story to the effect that Curschmann one day implied to a colleague, who was professor at a small university, that he had plenty of time to go round his wards in the morning, whereupon the colleague said: "I suppose you go round your wards in a motor-car."

Jena, a university founded in 1557, reached a high level of fame during the reign of the Grand Duke Charles Augustus of Saxe-Weimar (1775–1830), when among its professors were Schiller, Hegel, and Hufeland, the physician. New university buildings were opened in 1909. Jena is unique among universities in that it is intimately connected with, and partially subsidised by, a celebrated scientific and eminently successful commercial firm—namely, the great house of Zeiss. Dr. Cruchet gives a long and most interesting account of the founding of this firm, of its relations with the university, and of the work, both scientific and social, carried on thereby.

Strasbourg naturally filled Dr. Cruchet with very mixed emotions. His trained intellect cannot refrain from admiration of the magnificent buildings of the new German university commenced in 1872, and the newest portion of which, the children's clinic, was opened in 1910. There are four faculties besides medicine, but by far the most important buildings are devoted to medicine and its accessories. The university possesses its own heating, lighting, and power plant, a bakery, a butchery, a laundry, and machine sewing shops—in one word, the note of the university is "thorough."

Dr. Cruchet discusses the German opinion that Germany is the greatest country in the world, and that France is a decadent nation. He tells us that when he and some other French medical men visited the university and the hospital buildings in 1912, the director who showed them round casually remarked as they passed through the bakery, "We can bake enough for six army corps here." Thus, says Dr. Cruchet, even the hospitals, places of peace *par excellence*, are all organised so as to serve when the day comes as bases of supply and revictualling. The final chapter of the book is devoted to a comparison between the decentralised scheme of German university education and the centralised scheme in France, and Dr. Cruchet finds that the German is by far the better.

The whole book is one deserving careful study; it is written by a trained observer, and it is scrupulously fair. Germany is a great country. All her methods do not commend themselves to us, but her foresightedness is worthy of imitation, and the right attitude of other countries towards her may be summed up in the words of the elderly lady of Early Victorian days, who at a prayer meeting of intimate friends observed, "My dears, if we were all as painstaking, as patient, and as quick to seize an opportunity as is the Devil we should all be the better."

The Mental Deficiency and Lunacy (Scotland) Act, 1913 (3 and 4 Geo. V. Cap. 28).

With Introduction, Notes, and Appendices by J. EDWARD GRAHAM, K.C. Edinburgh and Glasgow: Willian Hodge and Co. 1914. Pp. 303. Price 12*s.* 6*d.* net.

FOR Scotland a Mental Deficiency Act was required and was passed, as was done in the case of England, in order to give effect to recommendations made by the Royal Commission appointed in 1904, but in the case of Scotland opportunity was taken to make various amendments in the existing lunacy laws. Hence the title of the Act, Part IV. of which applies to the latter branch of its subject matter. Differences of administrative machinery and in the laws in force regarding lunacy in England and Scotland explain the necessity for separate Acts in the two countries dealing with a subject the importance of which is equally realised in both, similar principles being observed in each statute. The "General Board of Commissioners in Lunacy for Scotland," now known as the General Board of Control, is strengthened by the addition of a medical member, and not more than four medical

deputy commissioners, one at least of these being a woman, take the place of the two deputy commissioners provided by the existing Scottish Lunacy Acts.

In Scotland, as in England, a large number of officials and public bodies will have to familiarise themselves with a new machinery, with financial questions, and with duties defined by law, before any general improvement of the condition of the mentally defective can be achieved, and Mr. Graham's book is a carefully and very conveniently arranged text-book which should be found useful by all, including medical practitioners, likely to require its guidance. The latter will find, for example, some useful observations upon the different forms of certificate applicable to lunacy and mental deficiency at the end of the author's clear and instructive introduction, supplemented by notes which are of a critical as well as explanatory character, where certificates are dealt with in the sections of the new statute. The author, it may be mentioned, does not conceal his opinion that a certain amount of haste in getting the measure through Parliament has left traces upon its drafting in places, to some of which he calls attention, and he justifies his observations by the instances cited. He has compiled what should be a helpful work of reference in connexion with its subject fully supplied with appendices, to which no doubt addition will have to be made in future editions, as fresh regulations are added to those already issued.

MISCELLANEOUS VOLUMES.

Dr. Finny's First Aid (London: Thomas Murby and Co. 1914. Pp. 33. Price 6*d*. net) is a useful note-book for ambulance students. It contains the principal facts of anatomy and physiology, various kinds of injuries, and their first-aid treatment, arranged by a lecturer on first aid at Kingston-on-Thames Technical Schools, and interleaved for notes.——Another useful little book on the same subject is *Why and Wherefore in First Aid*, by Dr. N. CORBET FLETCHER (London: John Bale, Sons, and Danielsson, Limited. 1914. Pp. 84. Price 6*d*. net). The question-and-answer method as applied in this little book serves a double purpose. For instance: "In stomach bleeding, why is blood dark and like coffee-grounds?" Answer: "The stomach juices act on and alter the hæmoglobin of the blood." In this case the question directed towards the explanation of a fact would tend with many persons to impress the fact itself on the mind more effectually than would such a question as "What is the character of the blood in stomach bleeding?" But really this is a matter of personal idiosyncrasy in the reader.——A practical little addendum to the first-aid library is Miss THEKLA BOWSER'S *The Whole Art of Bandaging* (London: John Bale, Sons, and Danielsson. 1914. Pp. 108. Price 1*s*. net), which shows throughout the results of her personal experience as a nursing sister of the St. John Ambulance Brigade. It contains many excellent and accurate illustrations.

Mother-craft for Schoolgirls, by FLORENCE HORSPOOL (London: Macmillan and Co., Limited. 1914. Pp. 57. Price 1*s*. net), is the result of the author's own experience as infant visitor to the Swansea corporation, and subsequently of three years' conduct of a "babies' welcome" at which young girls about to leave the elementary schools were trained in the craft of rearing the baby. It gives a description of the methods used in the classes there. The subjects dealt with are washing, weighing, dressing, and feeding the baby, the feeding of the nursing mother, sleep and fresh air, flies, food, baby's ailments, and so forth. Lady Mond contributes a preface. The book is written in simple language in graphic conversational form and is well illustrated. It can be commended.

The perennial *Chavasse's Advice to a Wife* (London: J. and A. Churchill. 1914. Pp. 348. Price 1*s*. 6*d*. net) now appears in its sixteenth edition and 420th thousand, revised by Dr. STANLEY DODD, assistant obstetric physician to Westminster Hospital. This venerable book, which has dissipated the fear of the unknown in maternity and given confidence to many generations of young wives, has been carefully brought into line with modern knowledge, and considerably pruned of its redundancies, without, however, any ruthless sacrifice of its quaint originality. A useful section on sexual hygiene has been added.

The only material other than official information contained in the *Hunterian Society Transactions, Sessions 1910–11, 1911–12, 1912–13, and 1913–14* (London: Headley Brothers. 1914. Pp. 76), edited by Dr. J. TYLOR FOX, consists of an account of the discussion on the uses of tuberculin that took place on March 27th and April 9th, 1913.

JOURNALS AND MAGAZINES.

Brain: A Journal of Neurology. Edited by HENRY HEAD. Vol. XXXVI. Parts 3 and 4. 1914. London: Macmillan and Co., Limited. Price 4*s*. net, or 10*s*. 6*d*. per annum.—This double number of *Brain* contains matter of great interest and importance which appeals both to neurologists and alienists. Dr. David Orr and Dr. R. G. Rows contribute a paper on Lymphogenous Infection of the Central Nervous System, which includes clinical and experimental proof of the importance of the lymphatic system as a vehicle of infective material. It also shows the histological changes which take place as a result of such infection and the manner in which vascular lesions may secondarily arise. Incidentally, therefore, the experiments make clear the mechanism of the production of spinal cord lesions in diseases such as tetanus and rabies.—Dr. Musken's article on a Study of the Posterior Longitudinal Bundle in Relation to Forced Movements is too technical to lend itself to detailed criticism. It seeks to show by experimental and histological examination the intimate connexion of the various structures concerned in equilibration with the posterior longitudinal bundle.—Dr. S. A. K. Wilson's extremely interesting and complete article on the Anatomy and Physiology of the Corpus Striatum, a record of experiments on the monkey, is a very important contribution, and is in many ways supplementary to the same author's monograph on Progressive Lenticular Degeneration.[1] —Professor Mingazzini's article on Aphasia Due to Atrophy of Cerebral Convolutions, without any focal lesions, directs attention to a class of cases of much importance both medically and legally.—Dr. F. E. Batten and Dr. Douglas Wilkinson describe an unusual type of hereditary disease characterised by mental as well as physical symptoms, and Dr. Orton, from the laboratory of the Worcester State Hospital, Massachusetts, contributes a Study of the Satellite Cells in 50 cases of mental disease.—The editor is to be congratulated on an exceptionally interesting issue.

The Burlington Magazine.—The November number of this excellent periodical contains an instructive article by Mr. Arthur Gardner on the sculptures of Rheims Cathedral, the primatial church of France, of which he writes that it "had very good claims to be considered the finest of all French cathedrals, and as such perhaps the supreme artistic creation of the human race." The article is accompanied by some excellent reproductions of photographs of the numerous splendid sculptural groups which adorned the cathedral and especially the magnificent porches, and makes sad reading, as it is impossible not to recognise that hopeless damage must have been done to the building, even though much, or indeed all, of the main fabric may be standing and stable. And the latter supposition is optimistic. An illustrated record of various famous works of art in Belgium is contained in the same number. The loss of life in war, and the unspeakable misery and heavy mortality that follow on its devastating operations are things which must come first in the medical mind, as, we believe, they also come first in the mind of the most enthusiastic connoisseur. But Belgium contains the epitomised lives of artists who have earned immortality, and the destruction of this work is in a sense recent murder. Milton said, "As good almost kill a Man as kill a good Book," thereby recognising the crime of intellectual assassination.

[1] Brain, vol. xxxiv. THE LANCET, April 27th, 1912, p. 1115.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 21, 1914.

Our Belgian Colleagues.

THE utter ruin which has fallen upon so much of gallant Belgium has destroyed the whole machinery of the medical profession and its adjuncts in that country. There exists no longer in Belgium a medical profession which can either cope with the misery and sickness of the inhabitants who remain, or make any attempt towards the protection of those who may return. We publish in another column an appeal from Professor JACOBS of Brussels, who points out in clear and moving terms the terrible position in which his colleagues and also the pharmacists of the country are involved. The majority of those living in the towns and villages that have been pillaged and burnt are utterly ruined. They can do nothing without help either to assist the population in its present plight or to ward off the effects of epidemic disease. No one can read the appeal without seeing how pressing is the need for immediate aid, and we trust that the Belgian profession will not turn in vain to their British brethren.

A committee has been formed, as has been announced, whose object is to give immediate succour to Belgian medical men and Belgian pharmacists to such degree as the circumstances of war permit. A letter this week from representative members of that committee announces the beginning of the work and appeals for subscriptions. For the moment the giving of assistance at once to the members of the medical and pharmaceutical professions in their daily work is being considered. That much more than this will have to be done, when the time arrives for the complete rehabilitation of this utterly brave and utterly miserable people, is clear. In the great settling up international arrangements will see that the Belgian medical profession is restored completely to its former distinguished place. And before that day arrives it may be feasible to organise a world-wide scheme to better the medical position in Belgium. But at the present moment money is wanted to maintain alive the sick and those who alone can aid them. The inhabitants of the greater proportion of Belgium—those, that is, who remain—are destitute, while the homes of many of them have been burnt or so wrecked and pillaged that the remnants are uninhabitable. The people are enfeebled by misery, shock, and ill-treatment, and as winter approaches many of them will assuredly fall a prey to the first contagious disease that attacks them, while the environment in which they live is congenial to the breeding of any infection. Prompt medical treatment is necessary to succour them, and the strictest care will have to be exercised to protect them from the onslaughts of epidemic disease. And the doctors and pharmacists on whom the task devolves are themselves as ruined as their ruined patients. They are quite helpless to discharge their duties unless material aid is promptly found for them, and the majority of them who remain in the country are unable to maintain an existence there. Their source of income is gone, their surgeries and offices have been destroyed, while the laboratories and business premises of the pharmacists have also perished on all sides.

The situation is so appalling that any attempt to describe it appears to belittle it, while the plight of the Belgian doctors and pharmacists who are here among us as refugees is also truly deplorable. We sincerely trust that our readers will do their best, sorely tried as many of them are by the events of the war, to respond to the plea of their Belgian colleagues. We cannot at once rehouse the Belgian doctors or place the Belgian pharmacists in the position that they enjoyed formerly, as the result of any appeal for money. We know that, though we all believe that these things will follow in due course. The immediate necessity is to help the Belgian doctors and pharmacists as far as the conditions of war permit, so that they in their turn may help their stricken compatriots. Let us all give what we can, for it is our bounden duty so to do.

Soldiers, Soldiers' Wives, and the Liquor Traffic.

IT appears to be beyond question that a substantial and regrettable amount of intoxication is to be observed at the present time among the wives and dependents of soldiers serving with the colours and also among soldiers now undergoing training in the various centres throughout the country. As a remedy the principal suggestion seems to be that public-houses, either everywhere or in particular districts, should be compelled by law to open later and close earlier. To open them at midday and to close them at 8 or 9 P.M. would be to follow some, at least, of the plans proposed. This method of dealing with the question is, however, liable to sound if obvious criticism. Although to curtail the hours of opening does clearly lessen the period during which persons inclined to drink in public-houses are able to do so, and to that extent saves them from temptation, at the same time, the temptation will still be there when the prescribed hour strikes, and anyone who desires to drink

to excess will still find ample time to do so unless his or her occupations prevent it. Soldiers, it may be remarked, do not get much opportunity to drink before midday, and soldiers' wives in most instances will not be prevented by business from becoming intoxicated at some time before 9 P.M. Nor will the latter class as a rule be saved from the opportunity and temptation to drink in their own homes by shorter hours of opening for licensed houses. Such a step would, in short, be nothing more than a palliative of a partial character for an evil which, where it exists, is no doubt of serious consequence to the individuals immediately affected as well as to the community.

The evil has different causes in different classes, and it is quite possible that the degree of its prevalence is liable to be exaggerated. Among women, wives of men serving, who receive a separation allowance, there are two contrasting conditions observable, which may be summarised by saying that some are pecuniarily worse off owing to their husbands' absence, while others are better off than when the wage-earner was with them. These last are the wives of men who when at home, either from selfishness or poverty, or perhaps prudently, keep them short of money, and it is probable that the women who are stated to have "taken to drink" belong largely to this class. Many women, too, no doubt, are feeling lonely and depressed without their husbands, while at the same time they have less work in their homes to occupy them; or perhaps if they have been earning money for themselves have been deprived of their usual occupations through the war. The problem of assisting women in such circumstances without depriving them of their justly due pecuniary allowances is not an easy one to solve, but it is to be hoped that influences may be brought to bear in their behalf which will stem the evil more effectively than the closing of public-houses for a few hours can ever do. It is also to be hoped that the weakness of a comparatively few who attract attention by public misconduct will not be mistaken for a vice affecting a large class which deserves our warmest sympathy. Thousands of soldiers' wives are now living their lives in circumstances of penury, deprived of husbands whose wages before the war were maintaining them in comfort. Thousands also are being made widows, and there is a field for benevolent enterprise among the "deserving" and "undeserving" alike (if such rough classification is permissible) which will long give scope for the energies of more kind-hearted persons than are likely to be found to occupy it. With regard to soldiers, and particularly those newly recruited and undergoing training, there is also the likelihood that the weakness of the few will be assigned as a characteristic to the general body. Here again there is a very immediate need for the assistance of the benevolent, given either in a pecuniary form or in that of personal work. The Young Men's Christian Association and other agencies are doing their best with this object in circumstances of exceptional and peculiar difficulty. Recruits are being trained in large masses, in localities where the opportunities for healthy recreation after violent and sustained exertion are few, and under conditions which are in many instances those of great discomfort if not of actual hardship. It may be highly desirable to forbid them to frequent public-houses after certain hours, or to close those houses earlier than is now done, but it is far better to benefit all alike by providing counter attractions, and opportunities for obtaining wholesome and attractive food and drink wherewith to supplement the meals furnished by the authorities. Moreover, it is to be hoped that as the season progresses the hurriedly improvised accommodation and commissariat of our training camps will be improved and reorganised so as to diminish still further the temptation to have recourse to the wet canteen or the public house.

The conference which took place last week at Caxton Hall, Westminster, under the chairmanship of the Archbishop of CANTERBURY, to consider the problem of alcohol and its relation to the war, was in many ways unprecedented. Discussions of temperance questions have often been a cause of acrimonious controversy among people who admittedly desire the national well-being, but who do not agree as to procedure. Few things are more significant than the way in which men and women of all classes and shades of opinion have been aroused to see the grave peril which faces a nation, which is in the throes of war, in connexion with the abuse of alcohol. One of the last, if not the last, appeal made by Lord ROBERTS was with reference to the subject of treating soldiers, and that he had intended to be present at the conference shows his remarkable prescience in all things that pertain to the welfare of the soldier. The conference was convened by the Bishop of CROYDON, and included among the speakers a number of well-known members of the medical profession. other selected speakers being representative of various interests in religious, political, and social life. It was decided, we believe, by those who planned the conference that questions of legislation should not be dealt with in the resolutions which were to be considered, important though this side of the question undoubtedly is. Many of the speakers referred to it, but attention was confined to what may be called the social aspects of the problem, which in a democratic country are of the greatest importance. Emphasis was therefore laid upon two lines of reform which are the counterpart of one another—viz., a pledge of total abstinence for the duration of the war, and a determined effort to supply the wants of soldiers, sailors, and civilians for suitable recreation and refreshment, apart from temptations to drink.

Annotations.

"Ne quid nimis."

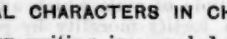
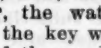
LORD ROBERTS.

Lord Roberts has died, as he doubtless would have wished to die, in harness. What more glorious end could he have had to a long, honourable, successful, and unstained career than to pass peacefully away in performing the great service of heartening his beloved troops in their terrific struggle? This "heartening" faculty of his was conspicuous throughout his career. He applied to all the affairs of men with which he was called on to deal the great principle that is the keynote of modern medicine: "Support the strength and aid Nature to do her beneficent work." Among other visits paid by him in France he inspected an Indian hospital ship in port, and there, as among his Indian troops, the worship and affection with which he was regarded was evidenced in a striking degree. The explanation of this whole-souled devotion to his person that always enveloped him is perhaps to be surmised from the graciousness of his commendation of the hospital ship to its commanding officer: "Your hospital is as near perfection as any I have seen; I congratulate you, sir." Few people, we believe, are aware of the intimate tie that linked him with our profession in that on Jan. 10th, 1901, he was admitted an honorary Fellow of the Royal College of Surgeons of England. And, indeed, as a soldier Lord Roberts excelled in just those qualities that should characterise the ideal medical man—patient and enduring under trial, alert and prescient against unexpected sources of danger, a past-master of his craft, keeping himself ever abreast of its development under rapidly changing conditions, courageous, confident, and resolute in carrying out his carefully thought-out plans, resourceful in emergency, above all petty feeling, humane and love-inspiring in his dealings with all, and relying both for guidance and for justification on the spiritual and moral force that informs the universe. He was truly a great soldier, a great man, a great example; that he should be buried beneath the dome of the metropolitan cathedral of St. Paul, in proximity to Nelson, is a fitting close to his priceless life-work.

THE END OF THE POLYCLINIC.

MANY London practitioners have lately learnt with regret that the Medical Graduates' College and Polyclinic, with which Sir Jonathan Hutchinson's name will always be associated, has ceased to exist. A general meeting of members and subscribers was held at the College, 22, Chenies-street, W.C., on Oct. 28th, when Dr. C. O. Hawthorne, chairman of council and editor of the *Polyclinic*, presided. Dr. Hawthorne explained that the meeting had been called to consider the situation of the College in so far as this was affected by the war. In view of the existing financial position the council were of opinion that the College could not be continued. In its early days the Polyclinic acquired a burden of debt from which it had suffered throughout its career. A scheme for putting it upon a secure basis had been in contemplation, and had times continued normal the council felt confident of carrying this through with a fair prospect of success; but all these plans had been brought to nothing by the unusual circumstances produced by the war, and there was now no option but to close the College. Mr. Lockhart Mummery, the honorary treasurer, then presented a financial statement and expressed the hope that there would be just sufficient funds to meet all liabilities. Dr. Dundas Grant thereupon moved a resolution, which was carried unanimously, approving the council's action in deciding to close the College and authorising the assignment of the lease of the premises to Sir Jonathan Hutchinson's trustees in satisfaction of their claim against the Polyclinic. We feel that the decision of the council, endorsed by the meeting, is the only business-like course to take in view of the financial position of the College. In happier circumstances the Polyclinic might have continued its useful activities on behalf of post-graduate medical education; but it was encumbered with a heavy debt from the beginning, and the complication of the war made its end inevitable.

MEDICAL CHARACTERS IN CHINESE WRITING.

CHINESE writing is a sealed book to by far the majority of the inhabitants of these islands, whose sole acquaintance with even the appearance of the "lettering" (if we may call it so) is confined to marks on pottery, jars of ginger, or chests of tea. Dr. Lucien-Graux, director of the *Gazette Médicale de Paris*, has just issued a most interesting book dealing primarily with Chinese medical characters, but prefaced by a general description of the innate quality (*génie*) of Chinese writing.[1] Chinese characters are not letters but a kind of picture, and in addition to each picture there is a "key picture" which is invariable for all words of the same class. Thus, to give Dr. Lucien-Graux's example, the words calf, ox, cow, bull, heifer, all belong to the same kind of animal, but there is nothing in the letters or syllables which make up the different words to show this. In Chinese, however, all these animals are expressed by different characters, but all these characters have as a portion of their composition a character signifying "bovine race." To make the matter more clear we may refer to one of the few instances of picture writing in English. Most travellers by train will have noticed here and there along the side of the line a large white painted board bearing on it in black a design like this  ; when the engine driver sees this he knows that he is approaching a water trough, from which he may take up water during the run. Now if English were written on the Chinese system all such words as ice, snow, rain, mist, pond, fountain, dew, and so on, would be prefaced by  , the water sign, and any foreigner who knew the key word would at once know that any one of the words mentioned above would have to do with water. There are in use in Chinese writing 214 of these key characters. The medical one is No. 104, and it is made up of two symbols, the one meaning "man," the other, "board" or "plank." These combined mean a man in bed, otherwise ill. To this key character others are added descriptive of various diseases or diseased conditions, but it is difficult to describe them in words without reproducing the characters, however we may attempt one or two. Baldness, for instance, is signified by the "ill" key character in Chinese, Ni;

[1] Les Caractères Médicaux dans l'Écriture Chinoise. Par Dr. Lucien-Graux. Paris: A. Maloine. 1914. Pp. 276. Price 4 francs.

and a symbol representing a reaped field; jaundice is represented by the "Ni" combined with a symbol representing a ploughed field—i.e., the colour of bare earth. All symbols are not as clear as these two, however, for, to take one at random, dysuria is expressed by Ni and another symbol representing two trees with their branches joined. Why this symbol should have been chosen is, says Dr. Lucien-Graux, a mystery. There are two addenda to the main portion of the work, the one a list of Chinese drugs and materia medica which is mediæval, and the other a translation of a very ancient Chinese document by an unknown writer giving a somewhat pessimistic, but at the same time noble, view of medicine. The writer begins by saying that medicine can only work in accordance with the inscrutable laws of Heaven; for man the mysteries of birth and death are unsolved, and medicine cannot save from death, a truism which was expressed in mediæval times by the line, "Contra vim mortis non est medicamen in hortis." "But," continues the Chinese writer, "the rôle of medicine is all the same an admirable one. She can prolong life, she can heal the multitude of evils which afflict poor humanity, she can fortify morality by preaching virtue and proscribing vice (that mortal enemy to health), and finally she can consolidate nations and peoples by hygienic counsels and recommendations." These are noble words, and with them we take leave of a remarkable work.

A STATE-AIDED INDUSTRY.

THE chemistry of coal-tar colours is so closely allied to that of synthetic drugs and fine chemicals used in medicine that the Board of Trade scheme for encouraging the permanent manufacture of dye-stuffs in the United Kingdom must inevitably promote the synthetic drug industry which until quite recently was wholly neglected in this country. The German firm which introduced diethyl-barbituric acid (veronal) and acetylsalicylic acid (aspirin) into medicine is as well known for its aniline dyes as it is for its synthetic drugs, and it would be difficult to say whether another famous firm is best known because it makes artificial indigo or because it produces salvarsan. If in Germany the manufacture of synthetic drugs has kept pace with the production of dye-stuffs, there is good reason to expect that the establishment on a proper scientific basis of the colour industry in Great Britain will mark the beginning of a new era for the British drug industry. Briefly, the proposal of the Board of Trade is that a limited company should be formed with a large capital of which the bulk would be subscribed by the consumers of dye-stuffs and others interested; the Government would subscribe a certain portion of the share capital and guarantee the interest on a large debenture issue for a term of years. This proposal is made after consultation with the committee on chemical manufactures appointed shortly after the outbreak of war to consider what steps it was advisable to take to promote the coal-tar colour and fine chemical industry. Seeing that manufacturers of medicinal chemicals were well represented on this committee, it would not be surprising to find when the full scheme is unfolded that provision has been made for the development of the drug section of the industry. No doubt theoretical objections to the State interference in industrial enterprise could be raised, but in the case of the industry in question these must be brushed aside for the substantial reason that without State aid the trade could not be developed. Without State encouragement the German chemical industry would never have reached its present vast dimensions, and it is obvious that our manufacturers could not successfully compete with an organisation which has taken Germany more than 40 years to bring to a state of perfection if the Government were to remain indifferent. The overhauling of our methods of chemical education, the removal of obstacles to the use of cheap denatured alcohol, and some modification of our patent law are among the reforms which must inevitably accompany the successful development of this industry, and since a Government department has undertaken to encourage this development these reforms will no doubt be hastened.

TREATMENT OF SNAKE-BITE.

IN the *Indian Journal of Medical Research* (1914, vol. ii., pp. 46–148) Captain H. W. Acton and Captain R. Knowles publish some important investigations into the nature and suitable treatment of snake-bite. In different varieties of snakes the toxicity of the venom varies. The common cobra, *Naia tripudians*, is *the* poisonous snake of India, and this because of its wide distribution and the volume of venom it gives with its bite. The hamadryad, or king cobra, a rarer snake, is also highly lethal. The bite of many of the vipers is fatal, but often after a longer lapse of time. The cause of death after viperine bites may be through local thrombosis, which may lead to pulmonary embolism; more usually it is due to multiple capillary hæmorrhages from the mucous membranes and internal organs. Sometimes death follows from secondary causes such as gangrene. The cobra venom acts differently. It contains two elements, a hæmolysin and a neurotoxin. The latter is the fatal factor. It causes paralysis of the respiratory centre in the medulla, paralysis of the nerve-endings in the diaphragm and respiratory muscles, and death from asphyxia. The shortest period within which death can occur after a cobra bite is about 30 minutes; the longest recorded was 30 hours. As to treatment, the usual remedies have been investigated experimentally in turn and the findings have much practical significance. 1. Ligature: In cobra poisoning the effect is merely to delay the onset of death by preventing the venom from at once getting into the circulation; it is wholly insufficient to save the life of the patient. In viperine bites, however, it will in some instances save life, even though no other measure be used; in others it will greatly prolong life. The local thrombosis induced tends to localise the venom and affords assistance to the application of local remedies. 2. Amputation: Value in cobra bites strictly limited. It must be performed within a few minutes or it is ineffective. In the case of such a bite, however, immediate ligature and amputation is the best line of treatment. 3. Limb compression fails to yield better results than simple ligature. 4. Incision into the bitten site appears to be of not much value, the difficulty being, apparently, that the venom is colloidal in character and being viscid is extremely difficult to express. 5. Much interest attaches to the observations made upon the supposed value of certain drugs, especially potassium permanganate. This drug in the form of crystals is widely used abroad, and is held in a small case, also enclosing a lance. On being bitten it is advised at once to enlarge the wound with the

lance and then rub in some of the crystals. This method of treatment is here practically condemned. It is held that supposed "cures" by such means fall into the category of non-lethal cases. It is better to inject subcutaneously 10 c.c. of a 5 per cent. solution of this salt; or, better still, 10 to 20 c.c. of a 1 to 5 per cent. solution of gold chloride. The advantage of the subcutaneous method is that it allows the drug to maintain longer contact with the venom than if the wound is enlarged. There is, however, difficulty in injecting much fluid into a part such as the finger or toe. The zinc salt of permanganate is probably preferable to that of potassium.

BROOKSIDE PARKS AS RURAL AIR-SHAFTS FOR TOWNS.

THE supply of adequate open spaces for towns is a matter which is increasingly attracting attention. Of course, in towns and cities already established the question of expense greatly limits the possibilities. In a paper on Open Spaces and Running Waters, read before the Imperial Health Conference last May, which was attended by delegates from Australia, Canada, South Africa, New Zealand, and many of the Crown colonies, Lieutenant-Colonel G. T. Plunkett, C.B., R.E.,[1] introduced some very practical considerations for our future guidance by calling attention to lost opportunities in London. He first recalled the fact that the Fleet River, which at one time was so broad and deep that ships laden with merchandise used to navigate up it from the Thames at Blackfriars as far as what is now Holborn Viaduct, and which was navigable for barges so late as 1652, was covered up and built over by 1766. Had the future growth of the city then been realised it would have been easy and comparatively inexpensive to preserve a stretch of land from one to two or three hundred yards or more wide, from the Thames upwards along the course of each of those streams which fall into it, widening out as they approach the hills to take in the slopes with their woods and ponds. By preserving all these streams and laying out a strip along each bank adequate open spaces would have been afforded, easily accessible to parts of London now practically deprived of park accommodation. Colonel Plunkett rightly points out that a park completely surrounded by houses can never be quite the same as one that communicates with the open country, which would preserve for the inhabitants the sights and sounds of the country as nature made it, leaving the appearance of the land as nearly as possible as it was while yet untouched by man, with its native trees, plants, wildflowers, and insect and bird life. For such air-shafts as are here contemplated would afford sanctuary for many kinds of birds that will not penetrate into the enclosed spaces which constitute our present parks and squares. It would therefore be better, he contends, instead of trying to form a ring of open spaces, necessarily more or less irregular, round a large city, to arrange that these spaces, wherever possible, should radiate from the central and more thickly populated districts and stretch outwards into the country like the spokes of a wheel. A strip of park, with an average width of perhaps only two to four hundred yards, but two or three miles or more in length, extending to the open country, would be far more valuable than an equal area in an enclosed square or circular plot. Even in London the most suitable ground to take up for parks, he considered, would be that along the course of our rivers and brooks; and still more important is it that in newer cities parks should be thus laid out along the banks of rivers and streams. It is gratifying to learn that this principle is being acted on by the Wimbledon authorities in regard to the Beverley Brook.

[1] Report of the proceedings of the Imperial Health Conference held at the Imperial Institute, London, May 18th to 21st, 1914. London: The Victoria League, 2, Millbank House.

1000 CASES OF CANCER OF THE STOMACH.

Dr. Julius Friedenwald presents an extremely careful clinical study of gastric carcinoma in the *American Journal of the Medical Sciences* for November, and as it is based on an analysis of 1000 cases it is worthy of serious attention. About 60 per cent. of his patients were males, and a similar percentage occurred in the fifth and sixth decades. Ulcer of the stomach, on the other hand, falls principally on the third and fourth decades. Heredity did not appear to play any part in over 90 per cent. Dr. Friedenwald thinks that his analysis makes for depreciation of the belief that peptic ulceration is an important precursor of gastric cancer, since even the most liberal interpretation failed to discover symptoms of ulcer in more than three-quarters of his cases. The gastric contents were analysed in 733 cases and in nearly nine-tenths of these no free hydrochloric acid was found. In a majority of such lactic acid was present, also Oppler-Boas bacilli. Sarcinæ were noted in one-third only and "coffee-grounds" in about two-thirds. Occult blood was found in the stools in 92 per cent., and especially in early cases, though obvious melæna occurred in 21 per cent., and hæmatemesis in 25 per cent. only. Pain and loss of weight were the most constant of symptoms, and anæmia was noted in a large majority. Vomiting occurred in nine-tenths of Dr. Friedenwald's cases; in contrast to the clinical picture of gastric ulcer, both pain and vomiting were notably associated with absence of free hydrochloric acid in the stomach contents. In only one-third was the tumour palpable within six months of the onset. In more than half the cases the growth was pyloric. It is surprising to find that fever was noted in nearly half; it is more often a late than an early symptom. In a majority the duration of life from the onset of symptoms was less than 12 months. Of 128 patients submitted to operations other than exploratory (gastro-enterostomy, gastrostomy, gastrectomy), not one was living at the time of the analysis. Dr. Friedenwald therefore urges earlier exploration, recognising the desperate nature of the malady and the hopelessness of the prospect in cases where the diagnosis has become apparent from clinical symptoms alone.

THE discussion on Surgical Experiences of the Present War, which was opened on Monday last at the Medical Society of London, and of which a full report appears in our columns this week, will be continued on Monday, Nov. 23rd, at 8.30 P.M., by Mr. D'Arcy Power, Mr. Charters Symonds, Mr. R. P. Rowlands, Dr. D. Embleton, and Dr. Ironside Bruce.

AT a meeting of the members of the Lister Institute held on Wednesday last the proposal of the Governing Body to amalgamate with the Medical Research Committee, appointed under the National Insurance Act, was rejected.

NOTE ON THE WOUNDS OBSERVED DURING THREE WEEKS' FIGHTING IN FLANDERS.[1]

BY G. H. MAKINS, C.B., F.R.C.S. ENG.,
COLONEL, ARMY MEDICAL SERVICE; CONSULTING SURGEON TO THE FORCES OVERSEAS.

Nov. 12th, 1914.

THE very large number of casualties during the fighting of the last three weeks has thrown immense pressure on the field ambulances and clearing hospitals at the front and also on the base hospitals at Boulogne. The transport of the patients during this period has been much accelerated on the one hand by the fleets of motor ambulances plying between the field ambulances and the clearing hospitals, and on the other by the very much shortened line of communication by rail to the medical base.

Transport Arrangements.

The motor ambulance has fully justified itself in the matter of rapidity and convenience, and although it is not likely entirely to take the place of the horse ambulance, since the latter can be used where the employment of motor vehicles is impossible, yet in the future the number of horse ambulances will no doubt be decreased. The serious disadvantage of motor transport lies in the amount of suffering experienced by the severely wounded; the jolts which on a motor tour only provoke a smile or a growl according to the frame of mind of the tourist as he traverses a stretch of bad surface, prove a terrible experience to the severely wounded man, especially if a fracture is existent. In this particular it is clear that the motor ambulance can never prove a substitute for the more smoothly running ambulance train, and that except in the case of the lightly wounded the portion of the journey performed in the motor ambulance should be kept as limited as possible. For the removal of patients from train to hospital and hospital to ship the motor ambulance has proved invaluable.

The clearing hospital as a unit is working well and has greatly lightened the work which in former campaigns has fallen upon the field hospital. At the same time the duties devolving on the medical officers have been extremely heavy, since at this stage not only have all the wounds been dressed, but many operations have been performed, a certain number of cases have had to be retained and cared for as of too serious a nature to warrant removal to the base, and every patient has received an injection of antitetanic serum, if this has not been already given at the field ambulance.

The ambulance trains are now equal to the necessities of the position, all furnish the primary requirement of intercommunication between the separate wagons, they are well equipped with medical and surgical stores and food, they are capable of being heated, and carry the staff of medical officers, nurses, and orderlies necessary for the care of the men and the dressing of their wounds. Many of the wounded have been arriving at the base well within 24 hours from the moment of reception of their injury. This cannot always be the case, since congestion of the railway may check the progress of the trains, and occasionally difficulty in collection of the wounded men or a temporary stay in the hands of the enemy may involve the loss even of days.

The sudden complete diversion of the line of communication to the new medical base and the consequent need of the establishment of a new series of hospitals has necessitated very strenuous endeavours to meet the wants of the situation, and had it not been possible to transport at once a large number of patients across the Channel, it is difficult to see how the patients could ever have been distributed to the hospitals situated in other parts of France. Happily, in the absence of suitable public buildings of any other nature, the use of the hotels and casinos of the town and its immediate neighbourhood has enabled the stress of work to be dealt with, and ten efficient hospitals are now established.

The Nature of the Wounds.

With the change in the military situation and the character of the fighting, the nature of the wounds to be dealt with has also undergone considerable alteration, the preponderance in the number of shell wounds has greatly decreased, and those inflicted by rifle bullets has risen to probably more than 50 per cent. The wounds are in the main of very severe type; this appears to be dependent on the fact that they have nearly all been received at the short distance of about the 200 yards which separates the opposing trenches, and that many bullets ricochet and acquire irregularity of flight by striking the margin of the trenches. The type of entry and exit wounds is somewhat varied from those produced by the older Mauser and Lee-Metford bullets; there is certainly more irregularity in form and size. One especially striking form is that in which the central round wound has a slit passing from opposite sides, suggesting that the original opening has been enlarged with a knife for purposes of exploration; such wounds are seen mainly on prominent points of the body, such as the margin of the patella or over an outstanding tendon. The number of large stellate exit wounds is also great, the most typical of all being those on the dorsum of the hand. The difficulty of being convinced as to the production of large explosive wounds by rifle bullet, shrapnel bullet, or fragment of shell respectively is very great. The patients positively state many wounds to have been produced by rifle bullets, which offer no resemblance to any type wound. Thus in one instance the whole length of the soft parts of the flexor aspect of the forearm was lacerated and laid bare beneath a persisting bridge of skin formed by two triangles of which the truncated apices were continuous in the centre, while the bases corresponded with the width of the limb at the bend of the elbow and the junction of forearm and palm respectively. The bones had certainly not been struck to increase the resistance. It could only be supposed that the bullet causing this injury must have been revolving around its transverse axis as it passed. This resembles the revolution of pieces of high velocity shell which must be assumed to take place in the many cases in which a quite small entry wound exists, together with a very extensive cavity formed by laceration of the soft parts within the limb.

A remarkable case offering absolute proof of the retention of sufficient heat by a spent bullet to burn the surface of the skin is worthy of mention, since it is the only instance which I have ever seen. A man under rifle fire was twice hit in the legs, and when on the ground thought he felt hot blood trickling over the front of his abdomen. He put

[1] THE LANCET, Oct. 10th (p. 905) and 24th (p. 1005), 1914.

his hand under his shirt and found a rifle bullet lying loose. Two days after five separate exact impresses of the bullet were to be seen on the abdominal wall, still bright red, and over two vesication had occurred; thus a burn of the second degree had been produced.

The multiple wounds produced by the continuous discharge of the machine guns were referred to in a previous note. A remarkable instance is at present under treatment; the five wounds passing transversely from before backwards are in a vertical line on the left side of the head and neck; the highest produced a gutter fracture of the left parietal region (which will possibly cause the death of the patient), the second struck the scalp below, a third bullet entered at the angle of the mandible and remained lodged over the surface of the bone, a fourth struck the mastoid process, and the fifth entered the root of the neck, wounding the carotid and jugular, between which vessels an arterio-venous communication of the aneurysmal varix type now exists.

Gangrenous Cellulitis.

The presumption expressed in a former note that the occurrence of gangrenous cellulitis might become rare with the establishment of more rapid means of transport has, unhappily, not been substantiated. A considerable number of these cases are still met with both at the clearing hospitals as well as at the medical base.

It has also proved that this condition may develop as the result of a simple rifle bullet wound, and when this is the case the absence of the safety vent afforded by the larger shell wounds may render the extension of the infection a still more rapid process. With regard to the influence of delay in transport on the development of gangrenous cellulitis, this affects only the extent to which the process may have reached when the patient comes under treatment, and can hardly be assumed to favour its actual origination. Experience of the same disease in civil practice needs only to be recalled to emphasise the rapidity with which the infection gains ground and the unlikelihood that any local antiseptic treatment could effectually cut it short.

The influence of the mechanical factor in favouring the spread of the process is well illustrated by the fact that while it spreads readily from wounds involving the deep planes of the limbs, the condition is not observed to develop in wounds of the thoracic parietes, of the abdominal wall, the neck or the scalp. In the latter cases the wounds afford sufficient vent to prevent the development of the tension which favours the extension of the process; again, it is clear that many large gaping wounds are affected locally by the same organism, gas bubbling up in large quantity from their depths while no progressive extension occurs.

Much work in the cultivation of the anaerobic organism is being done by Mr. Rowlands and Sir Almroth Wright.

The rapidity with which the condition develops does, however, vary somewhat, possibly from the degree of resistance possessed by the individual patient, sometimes, perhaps, from the fact that the infection is a mixed one, but certainly in direct proportion to the mechanical tension which exists in the affected limb, and which is usually dependent on the size and nature of the wound.

The advent is not heralded by serious general symptoms, neither the temperature nor pulse-rate rises very high, and there is little pain. The most striking features in the later progress are sleeplessness, the development of extreme anæmia, and a peculiar slackness in the tension of the pulse. The patients meanwhile take their food well, smoke cigarettes, and make little complaint.

Locally the first signs are rapidly increasing œdema, at first white, later large patches of bronzy redness of unequal depth of tint develop, while at the upper limit of the discoloured area crepitation is palpable. The bubbles of gas are often sufficiently large to raise an elevation which suggests on inspection a small varix of a vein; this is often seen in the areolar tissue over Scarpa's triangle. The glands of the axilla or groin enlarge early, but they are hard, not very tender, and never reach a large size or suppurate.

After two or three days the portion of the limb distal to the wound becomes cold, pulseless, and gangrenous. The distal gangrene is of the arterial type. The limb in cases which survive long enough mummifies, and a very sharp line of demarcation develops. Some of these limbs are intensely black in colour.

Only a small proportion of the cases present the typical tense limb with a "marbled" surface, but these are occasionally seen; in one which came under my notice the tense swelling not only involved the whole lower extremity and the trunk as high up as the angle of the scapula, but the penis and scrotum also attained a huge size. In a more frequent variety the proximal portion of the limb acquires a peculiarly soft boggy feeling with deep crepitation, especially along the vascular clefts; these are instances of a mixed infection, commonly with streptococcus. This seems evident, as in many cases which improve the anaerobic organism dies out and streptococcus cultivations only can be obtained from the wounds. The active hæmolytic change produced by the organisms is not only evidenced by the staining of the surface of the limbs, but also by the colour of the serous exudation from incisions made to relieve tension which are of a brilliant orange tint.

It is a very unusual surgical experience to have so frequently the opportunity of palpating surgical areolar emphysema as we have here. In one hospital the sign may be elicited successively in cases of wound of the trachea or lung, in cases of injury to the colon, and in limbs the subjects of emphysematous gangrene.

Treatment of Gangrene.

With regard to the treatment of the cases of gangrene no satisfactory method has been discovered. There is no doubt that multiple incisions made at the limit of advance of the process check it and bring it to a standstill, and some benefit has been claimed from the method of injecting hydrogen peroxide in the same region, although I have seen little to support the opinion myself. The adoption of this method, however, lands the surgeon in a serious difficulty, since in spite of the arrest of the gangrenous process the perished limb persists as a source of septicæmia, hectic develops, anæmia becomes extreme, and the patient succumbs before the opportunity for the performance of a secondary amputation arrives. A considerable difference exists in this respect, however, between the treatment of the upper and lower extremities. In the former a considerable proportion of the cases survive, while of the latter the large majority of the patients die from shock and septicæmia during the next 36 hours if the amputation needs to be made through the thigh. In either case the

only chance of securing a success lies in fashioning short flaps and leaving the stump completely open, for in all suppuration or an extension of the gangrenous process follows if the stumps are closed.

It is of interest to note that we are meeting with other forms of gangrene, the purely mechanical due to the degree of injury to the soft parts, embolic arterial gangrene following injury to the great vessels, and already some instances of frost bite of the toes.

ALCOHOL AND THE WAR.

A CONFERENCE took place at Caxton Hall, Westminster, on Thursday, Nov. 12th, under the chairmanship of the Archbishop of CANTERBURY, the object of the conference being to consider the problem of "Alcohol in its Relation to the War."

The Archbishop of CANTERBURY opened the meeting by referring in some detail to the reports which had been received of intemperance both among soldiers in training and also among their dependents. He did not feel, he said, that the blame attached so much to those who had fallen into this temptation, but to those who had placed temptation in their way or who failed to hold out the helping hand to those who particularly needed help. He believed that the situation could best be met by the wide adoption of a pledge of total abstinence for the period of the war, a view he had already expressed in a letter to the *Times*. By this act of self-denial those at home could show their sympathy with those at the front.

The first resolution recognised that as a result of the war there had been a grave increase of intemperance and pledged the members of the conference strongly to support Lord Kitchener's appeal for national help in this situation. Lord Roberts had signified his intention of being present and had been invited to propose a resolution to this effect, but he wrote a letter explaining that as he was going to France to see the Indian troops he could not be present. His place was therefore taken by Sir Clifford Allbutt.

Sir CLIFFORD ALLBUTT bore testimony to the good behaviour of the troops quartered at Cambridge; at the same time he fully recognised the extent of the evil. He stated that science had made it clear that healthy people are all as well, or better, without alcohol as with it, and referred to the theory, wrongly included under the head of Darwinism, that the evil would settle itself when those who have cravings for alcohol have been eliminated. He contended that the problem of to-day was not so much one affecting individuals as communities. If we wanted to see a strong community we must get rid of class distinctions and seek to help one another, and especially the dependents of those who were serving their country in the war. The public-houses had unfortunately been for many the only place for social gathering, and it was most important that other attractions should be provided.

Cardinal BOURNE, Archbishop of Westminster, in seconding the resolution, fully corroborated the Archbishop of Canterbury's statement as to the dangers of the moment in relation to alcohol. Emotions, he said, were gravely excited where men were leaving home to go to posts of peril, while those who were left behind were in distress and anxiety. He advocated further restrictions in the hours of opening public-houses.

Sir THOMAS BARLOW then proposed the second resolution, which recommended the general adoption of the suggestion that people of all classes should join in a pledge of total abstinence during the continuance of the war. Seeing that the resolution proposed a pledge of total abstinence for men in the services and civilians at home, he dealt with a difficulty felt by some as to the possibility of pure water being obtained by the troops. He said that, having carefully inquired into this subject, he was assured that under the excellent sanitary system initiated by the Army Medical Department there would be no difficulty of this kind. He referred to the occurrence of sexual disease, nine-tenths of the cases of which were believed to be mainly the result of alcoholism, saying that if we want to send our young soldiers across the Channel without any disability we must stop alcoholism. He had been told that when the German regiments first started out their behaviour was all that could be desired, but when they had been in the wine cellars lust, cruelty, and pillaging took place. He desired to emphasise the fact that the evil was an insidious one, and must be resolutely met by getting public authorities to do their duty, by providing other attractions and promoting a true sense of brotherhood, and particularly by renouncing the use of alcohol for the sake of others.

The Rev. J. CLIFFORD, D.D., seconded the motion in an eloquent speech, pointing out how many of the troops were already total abstainers, including a very large proportion of the Indian troops.

Major LEONARD DARWIN proposed the third resolution, which stated that "immediate steps would be taken in every locality to secure that proper provision be made for the supply of suitable places of recreation and refreshment both for men and for women, where there would be no temptations to drink." He also urged the carrying into effect by local authorities of the Temporary Restriction Act, 1914.

A fourth resolution determined that a manifesto should be drawn up embodying the principal resolutions, and that this should be sent to Lord Mayors and mayors, urging them to take the lead in carrying out the proposals.

All the resolutions were carried unanimously.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

MEETING OF COUNCIL.

AN ordinary meeting of the Council was held on Nov. 12th, Sir W. WATSON CHEYNE, the President, being in the chair.

The SECRETARY reported the death on Nov. 8th of Mr. Charles Barrett Lockwood, member of the Council. It was resolved to send a vote of condolence to his family.

It was resolved to grant diplomas of Membership to 67 successful candidates.

On the recommendation of the finance committee it was resolved to make a donation of 200 guineas to the National Relief Fund.

It was resolved to grant a pension to Mr. William Pearson.

Sir Frederic Eve was appointed a member of the committee of management in the vacancy occasioned by the retirement of Sir W. Watson Cheyne.

It was resolved to restore to the Membership of the College a Member who had been removed.

A letter was received from Lady Howse thanking the Council for their resolution of sympathy on the death of Sir Henry G. Howse.

The PRESIDENT reported that the Bradshaw lecture would be delivered by Sir Frederic Eve on Tuesday, Dec. 15th, at 5 P.M., and that the subject of the lecture would be Pancreatitis.

THE ENGLISH CONJOINT DIPLOMAS.—A recommendation from the committee of management of the Royal College of Physicians of London and the Royal College of Surgeons of England to alter the existing regulations for the admission to the Final Examination of the Conjoint Examining Board of students from recognised colonial, Indian, and foreign universities, has been approved and adopted by the councils of the two Royal Colleges. The revised regulation lays down that members of such universities who shall have passed such an examination or examinations at their Universities for the degree of Doctor or Bachelor of Medicine or Surgery as shall comprise the subjects of the First and Second Examinations of the English Conjoint Board, and who shall have completed the curriculum of medical study required by the regulations of the Board, will, two years after having passed such examinations, be eligible for admission to the Third or Final Examination for the L.R.C.P. and M.R.C S. diplomas.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

In accordance with the provisions of Her late Majesty's Order in Council of April 1st, 1881, Fleet-Surgeon James William Wilcocks Stanton has been placed on the Retired List.

The following appointments have been notified:—Staff-Surgeon: G. L. Buckeridge to the *Halcyon*. Temporary Surgeons: E. G. Fisher to the *Colleen*, additional, for Haulbowline Hospital Yard; and E. I. Parry to the *Indus V.*

The undermentioned have been promoted to the rank of Staff-Surgeon in His Majesty's Fleet: Thomas Creaser and Harry Marmaduke Langdale.

The undermentioned have been entered as Surgeons for temporary service in His Majesty's Fleet: Harry Oliver Blanford, George Muir Fraser, David Alexander Henderson, Eric Ambrose Linell, Matthew Neilson, John Pratt, Alfred George Sworn, Arthur Hyde Wear, John Philip Walker, Joseph Henry Bennett, and Clement Wheeler Wheeler-Bennett.

ADMINISTRATIVE SERVICES, ROYAL NAVAL DIVISION.

Fleet-Surgeon Arthur Gaskell, R.N., to be Assistant Director of Medical Services (dated Sept. 22nd). Captain F. Casement, R.A.M.C., to be Deputy Assistant Director of Medical Services with the temporary rank of Captain in the Royal Marines (dated Aug. 21st).

ROYAL ARMY MEDICAL CORPS.

Lieutenant-Colonel Herbert E. Cree is retained on the Active List under the provisions of Article 120 of the Royal Warrant for Pay and Promotion, 1913, and to be supernumerary (dated Nov. 27th).

George Seaton Buchanan is granted temporarily the honorary rank of Lieutenant-Colonel (dated Nov. 17th).

Major Robert J. Blackham, C.I.E., is seconded for service under the Government of India (dated Nov. 4th).

The undermentioned to be temporary Captains:—Dated Nov. 1st: Edward Kenneth Martin, Alfred Edward Johnson, and Robert Davies-Colley.

Temporary Lieutenant F. S. Brereton, late Captain, Royal Army Medical Corps, to be temporary Captain (dated Nov. 13th).

The undermentioned to be temporary Lieutenants: Dated Sept. 30th: George Leonard Grant. Dated Oct. 22nd: Trevor Richard Snelling, Richard Charles, Henry Charles Cadell Rennie, and Charles John Edgar. Dated Oct. 23rd: Arthur de Winton Snowden. Dated Oct. 24th: Roland Ravenscroft Wettenhall, Michael Joseph Kelly, Arthur Seal Blackwell, Evan William Griffith, Arthur Gibson Leitch, David Neilson Knox, William Wright Mackarell, John Boyd Orr, James Gray Duncanson, Maurice Patrick Scanlon, and Ernest Alfred Tozer. Dated Oct. 25th: Robert Williams Michell and Charles McMoran Wilson. Dated Oct. 26th: John MacInnes. Dated Oct. 27th: Warren Meade. Dated Oct. 28th: Thomas Henry Agnew and Martin Wentworth Littlewood. Oct. 29th: David Winthrop Woodruff and Robert Lee Brown. Dated Oct. 31st: John Burd Wood. Dated Nov. 1st: James Wilson Richardson, William Nicholas Alexander, Archibald Francis Wright, Horace Arthur Cutler, Arthur Geden Wilkinson, Hugh Young Riddell, Edward Francis Palgrave, Richard Picton Rosser, Charles Edgar Holton Smith, David James Melville Legge, William Robert Addison Coates, Reginald James Rogers, Herbert Lincoln Hatch, Stephen Barry Walsh, James Kilian Clarke, George Ernest Vilvandré, Peter Drummond, David John Evans, and William Anketell Leeper Dunlop. Dated Nov. 2nd: Charles Lester Graham, Charles Derwent Pye-Smith, Harold Mowat, William Alexander Hislop, John Norman Glaister, John Alexander, Francis Kenneth Kerr, Alexander Gordon Gilchrist, Thomas Boston Johnstone, Charles Murchison Bernays, Charles Ashley Flintoff, Ralph Stuart Renton, Lawson Cairns, Richard Bevan Llewellyn, Edward Daniel Parsons, Robert Crothers, Arnold Leeming, Peter Hamilton Robertson, Percy Gonville Lock, Laurence William Pole, William Tregenza, and Robert Thomson. Dated Nov. 3rd: Octavius Studdert Maunsell.

INDIAN MEDICAL SERVICE.

The King has approved the promotion of the following officers:—Lieutenants to be Captains: Dated July 29th: Percival Sandys Connellan, John Alexander Sinton, Eric Edward Doyle, Cyril Macdonald Plumptre, Archibald Wallace Duncan, Henry Lewis Barker, and Edward Austen Penny.

The King has approved the retirement of Lieutenant-Colonel George Yeates Cobb Hunter (dated Oct. 25th.)

The services of Lieutenant-Colonel S. E. Prall have been placed temporarily at the disposal of the Government of India. Captain M. A. Nicholson has been appointed to act as Civil Surgeon, Jacobabad, in addition to his own duties. Captain Robson has been posted to the Punjab. Major McConaghy has been posted to Bhopal as Agency Surgeon. Major Wilson has been posted as Medical Officer to the Mewar Bhil Corps. Major Hugo has been posted to Kashmir as Residency Surgeon.

TERRITORIAL FORCE.

Royal Army Medical Corps.

1st Home Counties Field Ambulance:—To be Lieutenants: James Evan Turle and Charles Hebden Gregory.

4th London Field Ambulance: To be Captains: George Earnest Nash and Lieutenant Alfred J. Williamson.

5th London Field Ambulance:—To be Captains: Sydney Clark and Charles Ernest Whitehead.

6th London Field Ambulance: Francis Rowland to be Captain.

1st North Midland Field Ambulance: To be Lieutenants: Ronald Briers Berry, Matthew Thomas Ascough, and John William Thomson.

2nd North Midland Field Ambulance: Captain Richard M. West to be Major.

3rd North Midland Field Ambulance: To be Lieutenants: Charles Christopher Grummitt and Wilfrid Anthony Legh Jackson.

3rd Northern General Hospital: Frank Arthur Hepworth to be Captain.

2nd West Riding Field Ambulance: Charles Nixon Smith to be Lieutenant.

1st London (City of London) Sanitary Company: Martin Priest to be Lieutenant.

1st Welsh Field Ambulance: Major Evelyn J. R. Evatt to be Lieutenant-Colonel (temporary).

3rd Welsh Field Ambulance: Major Andrew R. Wilson, from Attached to Units other than Medical Units, to be Lieutenant-Colonel.

1st London (City of London) General Hospital:—To be Captains: Thomas Jeeves Horder and Conrad Meredith Hinds Howell.

3rd London General Hospital: Lieutenant-Colonel Sir Rickman J. Godlee, Bart., K.C.V.O., resigns his commission. Major Bilton Pollard resigns his commission on account of ill-health. Major Sir Alfred P. Gould, K.C.V.O., to be Lieutenant-Colonel. Captain James E. Lane to be Major (to remain seconded). Captain Arthur F. Voelcker to be Major. Captain Sir John Bland-Sutton to be Major. Richard Robert Cruise to be Captain.

Notts and Derby Mounted Brigade Field Ambulance: Major Alexander R. Tweedie to be Lieutenant-Colonel. Captain Walter H. Fisher to be Major. Douglas John Marr to be Lieutenant.

1st South-Western Mounted Brigade Field Ambulance: Major Thomas H. Haydon to be Lieutenant-Colonel. Captain Alexander W. French to be Major.

1st Southern General Hospital: Major James T. J. Morrison is seconded.

3rd West Riding Brigade: Surgeon-Captain Archibald W. Cuff to be Surgeon-Major.

2nd East Lancashire Field Ambulance: Captain Alexander Callam is restored to the establishment.

2nd London Sanitary Company: James Clayton to be Lieutenant.

2nd East Anglian Field Ambulance: James Simson to be Lieutenant.

2nd Home Counties Field Ambulance: Frank Scroggie to be Lieutenant.

2nd Lowland Field Ambulance: James Wilson Burton to be Lieutenant.

3rd West Riding Field Ambulance: Oswald Frank Buxton to be Quartermaster, with the honorary rank of Lieutenant.

2nd Northern General Hospital: Douglas Seaton to be Captain.

2nd Scottish General Hospital: Captain David J. Graham to be Major.

4th Scottish General Hospital: James Robertson Riddell to be Captain.

Attached to Units other than Medical Units.—Lieutenant-Colonel John Macfarlane Cadell, retired pay (late Indian Medical Service), to be Major. Captain Haldinstein D. Davis is seconded. To be Captains: Henry William Williams, late Captain, Royal Army Medical Corps (Territorial Force), Lieutenant Robert N. Wallace, and Lieutenant George D. Collen. To be Lieutenants: John Leslie Green, Herbert Robertson, Philip Henry George Gosse, George Jackson Wilson, Wilson Howard Morrison, Henry Edward Fox, and Percival Thomas Rutherford (late Second Lieutenant, 4th London (Howitzer) Brigade, Royal Field Artillery).

TERRITORIAL FORCE RESERVE.

Royal Army Medical Corps.

Captain Frederick W. Sydenham, from Attached to Units other than Medical Units, to be Captain.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In the 97 English and Welsh towns with populations exceeding 50,000 persons at the last Census, 8083 births and 4517 deaths were registered during the week ended Saturday, Nov. 14th. The annual rate of mortality in these towns, which had been 13·8, 13·5, and 13·4 per 1000 in the three preceding weeks, further fell in the week under notice to 13·0 per 1000 of their aggregate population, estimated at 18,120,059 persons at the middle of this year. During the first six weeks of the current quarter the mean annual death-rate in these towns averaged 13·5, against 14·0 per 1000 in the metropolis. Among the several towns the death-rate last week ranged from 2·7 in Great Yarmouth, 3·0 in Carlisle, 5·2 in Wimbledon, 6·6 in Gillingham and in Eastbourne, and 6·7 in Devonport, to 17·6 in Blackpool, 17·8 in Merthyr Tydfil, 18·6 in Huddersfield, 22·3 in Newcastle-on-Tyne, and 22·5 in Liverpool.

The 4517 deaths from all causes were 147 fewer than the number in the previous week, and included 454 which were referred to the principal epidemic diseases, against 472 and 497 in the two preceding weeks. Of these 454 deaths, 167 resulted from measles, 131 from infantile diarrhœal diseases, 58 from diphtheria, 42 from scarlet fever, 39 from whooping-cough, and 17 from enteric fever, but not one from small-pox. The mean annual death-rate from these diseases was equal to 1·3, or 0·1 per 1000 less than that recorded in each of the two preceding weeks. The deaths attributed to measles, which had increased from 67 to 146 in the four preceding weeks, further rose to 167 last week, which was the highest number of deaths from this cause recorded in any week of this year; the highest death-rates from this disease were 1·4 in Plymouth and in Oldham, 1·5 in Edmonton, 1·9 in Huddersfield, 2·0 in Grimsby and in Wakefield, 2·2 in Gateshead, 3·4 in Wigan, and 4·6 in Newcastle-on-Tyne. The deaths of infants (under 2 years), which had steadily declined from 1223 to 169 in the eight preceding weeks, further fell to 131 last week, and included 36 in London, 13 in Liverpool, 11 in Manchester, 5 in Birmingham, and 4 each in Salford, Sunderland, and Rhondda. The fatal cases of diphtheria, which had been 79, 61, and 93 in the three preceding weeks, declined to 58 last week, of which 12 occurred in London 4 each in Liverpool, Manchester, and Middlesbrough, and 3 each in Stoke-on-Trent and Cardiff. The deaths attributed to scarlet fever, which had been 37, 38, and 34 in the three preceding weeks, rose to 42 last week, and included 8 in London, 6 in Manchester, 5 in Liverpool, and 2 each in Bristol, Oldham, Preston, Middlesbrough, and Cardiff. The deaths referred to whooping-cough, which had been 35, 32, and 38 in the three preceding weeks, were 39 last week, of which 11 were registered in London, 3 each in Nottingham and Liverpool, and 2 each in Manchester, Salford, South Shields, and Newcastle-on-Tyne. The fatal cases of enteric fever, which had been 19, 14, and 17 in the three preceding weeks, were again 17 last week, and included 3 in London and 2 each in Bradford and South Shields.

The number of scarlet fever patients under treatment in the Metropolitan Asylums Hospitals and the London Fever Hospital, which had steadily increased from 3071 to 4769 in the 12 preceding weeks, had further risen to 4976 on Saturday last; 751 new cases were admitted during the week, against 657, 598, and 690 in the three preceding weeks. These hospitals also contained on Saturday last 1602 cases of diphtheria, 72 of enteric fever, 62 of measles, and 57 of whooping-cough, but not one of small-pox. The 1153 deaths from all causes in London were 49 fewer than in the previous week, and corresponded to an annual death-rate of 13·3 per 1000. The deaths referred to diseases of the respiratory system, which had been 191, 197, and 193 in the three preceding weeks, further declined to 181 in the week under notice, and were 23 below the number recorded in the corresponding week of last year.

Of the 4517 deaths from all causes in the 97 towns, 194 resulted from different forms of violence and 370 were the subject of coroners' inquests, while 1329 occurred in public institutions. The causes of 36, or 0·8 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest. All the causes of death were duly certified in Manchester, Leeds, Bristol, West Ham, Bradford, Nottingham, and in 75 other smaller towns. Of the 36 uncertified causes of death, 7 each were registered in Birmingham and Liverpool, 4 in Stoke-on-Trent, 3 in London, and 2 each in Bury, Sheffield, and Sunderland.

HEALTH OF SCOTCH TOWNS.

In the 16 largest Scotch towns with an aggregate population estimated at 2,293,200 persons at the middle of this year, 1071 births and 668 deaths were registered during the week ended Saturday, Nov. 14th. The annual rate of mortality in these towns, which had been 15·0, 14·6, and 15·8 per 1000 in the three preceding weeks, declined to 15·2 per 1000 in the week under notice. During the first six weeks of the current quarter the mean annual death-rate in these towns averaged 15·2, against 13·5 per 1000 in the 97 large English towns. Among the several towns the death-rate last week ranged from 5·0 in Motherwell, 6·3 in Ayr, and 8·8 in Kilmarnock, to 18·6 in Dundee, 18·7 in Greenock, and 18·9 in Hamilton.

The 668 deaths from all causes were 28 fewer than the number in the previous week, and included 50 which were referred to the principal epidemic diseases, against 78 and 79 in the two preceding weeks. Of these 50 deaths, 20 resulted from infantile diarrhœal diseases, 8 from scarlet fever, 7 from diphtheria, 7 from whooping-cough, 5 from enteric fever, and 3 from measles, but not one from small-pox. The mean annual death-rate from these diseases was equal to 1·1, against 1·3 per 1000 in the 97 large English towns. The deaths of infants (under 2 years) from diarrhœa and enteritis, which had been 31, 26, and 24 in the three preceding weeks, further declined to 20 last week, of which 7 were recorded in Glasgow, 4 in Edinburgh, and 2 each in Dundee, Paisley, and Coatbridge. The deaths referred to scarlet fever, which had been 16, 14, and 17 in the three preceding weeks, fell to 8 last week, and comprised 5 in Glasgow, 2 in Aberdeen, and 1 in Edinburgh. The fatal cases of whooping-cough, which had been 9, 14, and 12 in the three preceding weeks, fell to 7 last week, of which 6 occurred in Glasgow and 1 in Hamilton. The deaths attributed to diphtheria, which had been 19, 16, and 18 in the three preceding weeks, fell to 7 last week, and included 3 in Glasgow and 2 in Dundee. The 5 deaths referred to enteric fever were equal to the average in the earlier weeks of the quarter, but showed no excess in any of the towns. The 3 fatal cases of measles, of which 2 were recorded in Glasgow and 1 in Dundee, were also equal to the average in the earlier weeks of the quarter. In addition to the deaths from the above epidemic diseases, a fatal case of typhus was registered in Dundee.

The deaths referred to diseases of the respiratory system, which had steadily increased from 62 to 104 in the eight preceding weeks, further rose to 111 in the week under notice; 32 deaths resulted from different forms of violence, against 17 and 30 in the two preceding weeks.

HEALTH OF IRISH TOWNS.

In the 27 town districts of Ireland with an aggregate population estimated at 1,205,280 persons at the middle of this year, 514 births and 408 deaths were registered during the week ended Saturday, Nov. 14th. The annual rate of mortality in these towns, which had been 15·8, 15·2, and 18·2 per 1000 in the three preceding weeks, fell to 17·7 per 1000 in the week under notice. During the first six weeks of the current quarter the mean annual death-rate in these towns averaged 16·4, against corresponding rates of 13·5 and 15·2 per 1000 in the English and Scotch towns respectively. The annual death-rate last week was equal to 18·1 in Dublin (against 13·3 in London and 15·3 in Glasgow), 16·6 in Belfast, 15·6 in Cork, 20·3 in Londonderry, 16·2 in Limerick, and 26·6 in Waterford, while in the 21 smaller towns the mean death-rate was 18·1 per 1000.

The 408 deaths from all causes were 12 fewer than the number in the previous week, and included 40 which were referred to the principal epidemic diseases, against 51 and 48 in the two preceding weeks. Of these 40 deaths, 14 resulted from scarlet fever, 10 from infantile diarrhœal diseases, 9 from measles, 3 from diphtheria, 2 from enteric fever, and 2 from whooping-cough, but not one from small-pox. The mean annual death-rate from these diseases was equal to 1·7, against corresponding rates of 1·3 and 1·1 per 1000 in the English and Scotch towns respectively. The deaths attributed to scarlet fever, which had been 5, 12, and 6 in the three preceding weeks, rose to 14 last week, and comprised 8 in Belfast, 5 in Waterford, and 1 in Dublin. The deaths of infants (under 2 years) from diarrhœa and enteritis, which had been 21, 19, and 21 in the three preceding weeks, declined to 10 last week, of which 4 occurred in Dublin and 4 in Belfast. The fatal cases of measles, which had been 7, 7, and 11 in the three preceding weeks, fell to 9 last week, and included 7 in Belfast. The 3 deaths attributed to diphtheria, comprising 2 in Kilkenny and 1 in Cork, were equal to the average in the two preceding weeks. The 2 deaths from whooping-cough were recorded in Belfast, and those from enteric fever in Dublin and Ballymena. In addition to the above, a fatal case of typhus was registered in Dublin.

The deaths referred to diseases of the respiratory system, which had been 60, 61, and 86 in the three preceding weeks, fell to 67 in the week under notice. Of the 408 deaths from all causes, 144, or 35 per cent., occurred in public institutions, and 4 resulted from various forms of violence. The causes of 17, or 4·2 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest; in the 97 large English towns the proportion of uncertified causes did not exceed 0·8 per cent.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Medical Life in Paris To-day.

NOTWITHSTANDING the preoccupations and horrors of war medical life in Paris has resumed its course in all the scientific societies. Naturally, most of the communications concern themselves with the all-absorbing topic of the hour. At the Académie de Médecine, M. Rémond, of Toulouse, has recommended the use of a camphorated saline, obtained by adding camphor (which dissolves in the proportion of 20 centigrammes in 100 cubic centimetres) to any isotonic serum. This camphorated serum, given intravenously, brings about rapid resolution of the morbid conditions in pneumonia and bronchopneumonia. It also favourably influences staphylococcal and streptococcal infections, and seems to offer all the advantages of camphorated oil without any of its disadvantages. M. Fernet recommends the use of two pairs of gloves or socks to overcome cold; cotton gloves or socks are recommended to be worn next the skin, and covered externally with woollen ones. M. Demmler has forwarded a communication of particular interest at the present time, when so many of the wounded are affected with tetanus. Recalling Dr. Verneuil's advocacy of chloral in 20 to 25 gramme daily doses, M. Demmler recommends its administration in a dose of 6 grammes every six hours until torpor is produced, which suppresses the hyperexcitability of tetanus. M. Capitan, who read this communication to the Academy, added that he owed a complete success in a particularly grave case to this method. The Société de Chirurgie received a communication from Dr. Quénu on the treatment of gangrenous wounds in warfare by opening up of the wound and sterilisation by hot air. As immediate primary opening up was a matter for the medical service at the front, M. Quénu's observations dealt only with delayed and secondary incision. After free incision a minute disinfection of the ragged parts of the wound is called for. Spraying and irrigation with pure oxygenated water are very useful for that purpose. This disinfection suffices for small superficial sloughing, but for cases in which the gangrene invades muscular masses and extends deeply recourse must be had to sterilisation of the wound by hot air up to 500° or 600° C. with Gaiffe's apparatus. It is important to cleanse the smallest recesses without dread of destroying muscles. The large vascular and nerve trunks should be avoided. These measures are succeeded on the following days by irrigation with oxygenated water. This method seems to M. Quénu to be the best treatment for partial gangrene and to afford the greatest protection against its spreading and the transformation of a partial into a complete gangrene. M. Toussaint reported two cases in which he showed that Michel's clamps appeared to have brought on phlegmonous complications, which receded after the removal of the clamps and drainage of the wounds. Dr. Paul Thierry recommended in serious cases of septicæmia among the wounded in war the use of hypodermic injections of from 1 to 2 centigrammes of pilocarpine repeated daily. The profuse sweating occasioned, in conjunction with a free ingestion of abundant fluids, causes a veritable lavage of the blood, and removes the toxins from the blood without injuring the red corpuscles. This procedure may give excellent results even in desperate cases.

The Opening of the Winter Session.

At this time of the year the streets of Paris are usually invaded, so to speak, with a cloud of white posters announcing the reopening of the various courses of higher instruction. This year these posters present an extraordinary character, stating, as they mostly do, that such-and-such a professor will be replaced by a colleague, since he has been called up to serve with his regiment. Naturally, the Faculty of Medicine is one of those most affected by this calling up of its professors for military service. Though the courses for the first- and second-year students will continue under almost normal conditions, practically all the other courses have been postponed to the summer session. Courses of internal and external pathology, however, will be held during the winter session, and the clinics will remain open to students. There has been considerable misgiving that the continuance of the regular courses may give an unfair advantage to students exempt from military service or not yet called up, to the prejudice of those who are on service. The Ministry of Public Instruction has accordingly made an announcement which should dissipate these fears. A series of measures have been taken to safeguard the rights of those students who are fighting for their country—cumulative inscriptions, special examinations and courses, and adjournment of the *concours* until the termination of hostilities.

Foreign Bodies in Military Surgery.

At a recent meeting of the Académie des Sciences Professor Lippmann drew attention to the electromagnetic balance devised by the well-known electrician, M. Hughes, which discloses the situation of a metallic substance (e.g., a coin, bullet, &c.) in the body. This apparatus is the more suitable for military use in that it is simple and can be easily constructed at small expense. It consists of an electric battery, an interrupter, and two small induction coils communicating with a telephone, which rings whenever one of the coils is brought into contact with a metallic substance. If the latter is magnetic, as, for instance, a splinter from a shell or a German bullet, the effect is intensified. This apparatus is intended to be of service in searching for bullets wherever an X ray apparatus is not available, and is, of course, an adaptation of an old-fashioned idea.

Right to Practise for Refugee Belgian Doctors.

The Académie de Médecine has decided to seek on behalf of refugee Belgian medical men the right to exercise their profession in those localities—numerous enough just now—which have been deprived partly or altogether of medical aid. Also at the request of M. Borel, director of the Second Maritime Sanitary Area (*circonscription*), the Minister of the Interior has authorised the appointment of Belgian doctors of medicine as ships' surgeons in the French mercantile marine during the continuance of the war.

The Treatment of Captured Medical Officers.

The Société Médicale des Hôpitaux, acting on private information, occupied itself at its last meeting, together with the surgeons, accoucheurs, and specialists who wished to take part, with the fate of their prisoner *confrères*. It seems that some of them, being captured with the troops to which they were attached or the ambulances with

which they served, are being treated as prisoners of war, in defiance of the regulations of the Geneva Convention, and that many are interned in camps, fortresses, and barracks without any outlet for their professional services; whereas all being furnished with the regulation brassards should have been liberated. To remedy this condition the Société Médicale des Hôpitaux has directed its secretary to address a letter to the President of the Geneva Red Cross, informing him of this regrettable occurrence, and calling on him to investigate its truth.

A New Chair at the Paris Faculty of Medicine.

A chair in the hygiene and clinical medicine of infancy has been established at the University of Paris. Dr. Marfan, professor of therapeutics in that faculty, has been nominated, at his own request, to the new chair, dating from Nov. 1st, 1914.

Nov. 16th.

ITALY.

(FROM OUR OWN CORRESPONDENT.)

The Italian Army Medical Service.

Surgeon Captain Mendes publishes in a recent number of the *Policlinico* a long article upon this subject which is naturally of interest in Italy where there are already nearly a million men under arms. A short account will show the general similarity in the arrangements of both Italian and British armies. To each regiment of the line, Bersaglieri or Guards, seven regimental medical officers are assigned—a captain in charge of the whole regiment, and two lieutenants to each of the three battalions of which the regiment is composed. In addition there are 6 corporals of the medical corps and 48 orderlies, or 2 corporals and 16 orderlies to each battalion. In action the regimental medical officers are responsible for the regimental dressing station, which has supplies sufficient for dealing with 300 to 350 wounded. From here the wounded pass to the "sezioni di sanità," or divisional ambulances. Each of these is divided into two equal sections. A major is in command of the whole, with 2 captains, 4 lieutenants, 8 corporals, 17 nursing orderlies, and 195 stretcher-bearers, besides the personnel of the transport. The equipment is either carried by mules or in two special wagons containing the technical outfit, eight ambulance wagons, and six ordinary regimental carts. It is provided with two tents, 7 by 7 metres, and 92 stretchers. Each army corps has one "sezione di sanità" to each of its divisions, and an additional one for its reserve troops. The next line is formed by the field hospital, transported by wagons or mules and containing 50 beds. It is under the command of a captain, with two lieutenants, a clerk, a dispenser, a priest, and a staff of 30 men. During action this small field hospital is expected to advance and take up a position near its corresponding divisional ambulance. It is provided with at least four tents, of which two are 9 by 11 metres and two 7 by 7 metres. There is one of these small field hospitals to each division. Behind these come the field hospitals of 100 or 200 beds, forming the first units of the second line, and under the orders of the general in command of the army. Twenty of these field hospitals are allotted to each army. Their staff is proportionally on the same scale as the smaller field hospitals. For the transport of the wounded to the base Italy has been supplied with excellent hospital trains by the "Croce Rossa." Each of these will take 200 cases on stretcher beds. The staff is composed of four doctors and 40 assistants. The equipment is that of a hospital, so that both surgical and medical cases can be dealt with, and the journey be continued for days without injury or inconvenience to the patients. Besides these the Army Medical Department have trains which are convertible for use for the transport of the wounded. Each of these consists of 35 covered goods vans furnished with supports and hooks to take either two or three tiers of stretchers, making accommodation available for either 280 or 420 wounded. Each train has a captain of the Army Medical Corps, three lieutenants, and 40 orderlies. Four of these trains are at the disposal of each army.

The Effect of Alcohol upon the Mental Processes of Young People.

L'Igiene della Scuola refers to some interesting experiments which Signorina Sertoli, a schoolmistress, has carried out upon the influence of small quantities of alcohol on the mental processes of young people. Her subjects were a girl aged 10 and two boys aged 14 and 16 years respectively. Their normal capacity as regards attention and memory was first determined and the experiments were made two months later. Half an hour before examining a small quantity of marsala, containing 14 per cent. of alcohol, was administered, the amount varying with the age of the subject, and increasing slightly in successive experiments. The conclusions arrived at were: 1. Alcohol in small quantities produces a psychical excitation which rapidly reaches its maximum and slowly declines. 2. A slight alcoholic excitation renders the process of attention quicker, more intense, and more oscillating. 3. As regards memory, it makes the process of fixation more rapid and clear, but the conservation of the memory-contents is less resistant. At the same time, it is a transitory cause of the rise of subconscious memories to the level of consciousness. 4. Alcohol causes the lowering or disappearance of certain moral sentiments, especially those which tend to restrain human activities. This effect varies with the temperament of the subject, being greatest in the emotional and least in the phlegmatic.

Nov. 14th.

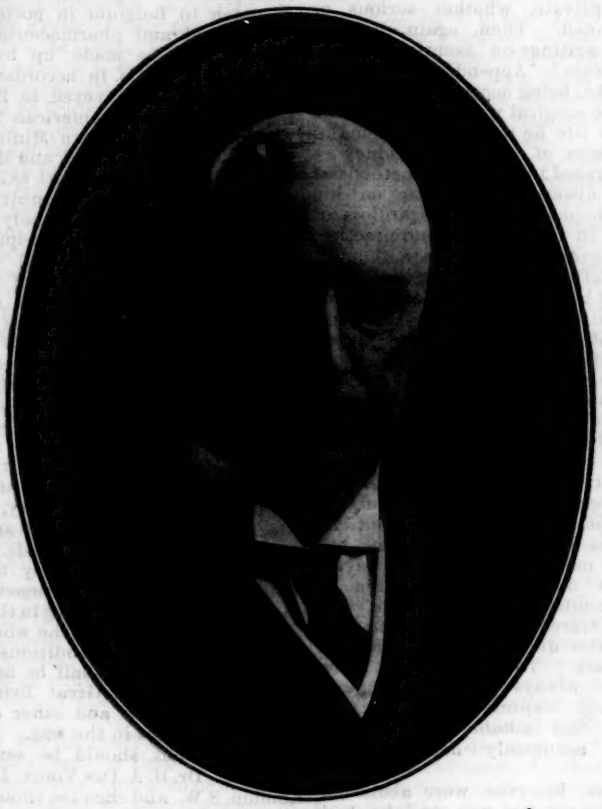
THE BENGAL MEDICAL COUNCIL.—The constitution of the Bengal Council of Medical Registration is now complete, and the following medical men have been appointed members:—Surgeon-General F. A. Harris, C.S.I., M.D., I.M.S., Surgeon-General with the Government of Bengal (President); Lieutenant-Colonel W. J. Buchanan, C.I.E., M.D., I.M.S., Inspector-General of Prisons, Bengal; Lieutenant-Colonel F. O'Kinealy, I.M.S., surgeon superintendent, Presidency General Hospital; Lieutenant-Colonel E. A. R. Newman, M.D., I.M.S.; Lieutenant-Colonel J. T. Calvert, M.B., I.M.S., Principal and Professor of Medicine, Medical College, Calcutta; Lieutenant-Colonel C. R. Stevens, F.R.C.S., I.M.S., professor of clinical and operative surgery, Medical College, Calcutta, and Surgeon to the College Hospital; Major D. McCay, M.D., I.M.S., professor of physiology, Medical College, Calcutta; Rai Upendra Nath Brahmachari Bahadur, M.D., teacher of medicine, Campbell Medical School, Calcutta; Lieutenant-Colonel A. E. Harold Brown, M.D. Durh., M.R.C.P., I.M.S. (retired); with Dr. S. P. Sarbadikari, Babu Hari Dhan Dutt, L.M. & S., Dr. Kedar Nath Das, L.M. & S., Dr. Sarat K. Mullick, and Rai Sahib Giris Chandra Bagchi.

Obituary.

CHARLES BARRETT LOCKWOOD, F.R.C.S. ENG.,

CONSULTING SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

Mr. C. B. Lockwood, the distinguished surgeon and anatomist, whose death took place on Nov. 8th at his residence, 19, Upper Berkeley-street, W., was the third son of the late George Lockwood. He was born at Stockton-on-Tees on Sept. 23rd, 1856, and was educated at Bramham School and St. Bartholomew's Hospital. He qualified M.R.C.S. Eng. in 1878, and obtained the Fellowship three years later. In 1882 he was appointed demonstrator of anatomy in the medical school of St. Bartholomew's Hospital, and held this post until 1892, when he was appointed assistant surgeon to the hospital. He was promoted to be full surgeon at the end of 1903, filling the vacancy caused by the death of Mr. W. J. Walsham, and retired from the active service of the hospital in 1912, when he was elected consulting surgeon. Mr. Lockwood's ten years' work in the anatomical department formed an important epoch in his career. He soon built up a high reputation both by his researches in anatomy and by his general teaching capabilities. At this period, though he was always rather reticent on the subject, it would appear that his life was by no means an easy one. One of his oldest friends writes, "I have seen his career from the struggling demonstrator of anatomy days to the zenith of his fame," and from this and private information it is clear that the fight for supremacy was very strenuous. In this he was not alone. Sir Henry Butlin, one of his greatest friends, passed through a similar ordeal. Both emerged from the fight with conspicuous success.



CHARLES BARRETT LOCKWOOD.

(From a photograph by Messrs. Elliott and Fry, Limited.)

In addition to his duties at St. Bartholomew's Hospital Mr. Lockwood was for some years surgeon to the Great Northern Central Hospital and consulting surgeon to the Royal General Dispensary. In 1887, 1888, and 1889, and again in 1895 he was a Hunterian professor at the Royal College of Surgeons of England, while in 1908 he was elected to the Council of the College and held this office at the time of his death. In 1904 he delivered the Lettsomian lectures before the Medical Society of London on "Aseptic Surgery in Theory and Practice," a subject which he had made peculiarly his own. Mr. Lockwood also had the distinction of having served as president of the Anatomical Society, of the Medical Society of London, and of the Harveian Society of London. A colleague sends the following intimate appreciation of Mr. Lockwood's work and character:—

"The unexpected and early death of a great surgeon must invariably come as a severe blow to those who have worked with him, more especially when the attendant circumstances are of so tragic a nature as in this case. Here is a surgeon who had spent many years of his life in combating sepsis, who had devoted his talents to the elucidation of the precepts of aseptic surgery, and who had taught on this subject to the whole world; here is such a man finally falling a victim to those very organisms against whose action he had fought so strenuous and so successful a fight. And yet the manner of his death was typical of the way in which he never spared himself when the life of a patient was at stake. Early in October he was operating on a patient for appendicular peritonitis, a disease on which Lockwood had written so insistently and thoroughly. The condition of the patient was grave and great speed of execution was demanded, and he pricked his finger when inserting almost the last stitch. He was taken ill the same night, and died five weeks later from septicæmia.

When I entered St. Bartholomew's in 1894 Willett, Butlin, and Lockwood were the three surgeons who impressed me most—Willett by reason of his ruggedness, strength of character, and honesty of purpose; Butlin on account of his teaching and interesting personality; Lockwood through his wit and his striking surgical technique. How little I thought that I should subsequently act as his assistant surgeon for many years and attend him on his deathbed. In the wards of the hospital he was beloved by his house surgeons and by his dressers. The patients seemed instinctively to know that they had a great man to deal with. His powers of observation were so keen that no malingerer ever

escaped undetected. No point in the history of the case was considered too trivial, and no clinical fact was eliminated except after the most careful scientific and pathological investigation. During the nine years that he occupied the post of surgeon to the hospital three assistant surgeons served under him, each of whom considered that no task was too great if set by him.

Lockwood always expressed himself in few words, concise and dogmatic. He loved nothing better in the evenings, after the day's work was done, than that one of his friends or colleagues should drop in for a chat on surgery or fishing. When visited unexpectedly he was always to be found at work, engaged at his correspondence, writing up his cases—every case that he operated on, whether in hospital or in private, whether serious or trivial, was fully noted. Then, again, he was a serious author, his writings on 'Aseptic Surgery,' 'Hernia and Varicocele,' 'Appendicitis,' 'Carcinoma of the Breast,' &c., being accepted as standard works throughout the surgical world. During the last few weeks of his life he was fully occupied in working up the surgery of 'Movable Kidney'—delighted at being engaged in some new methods of treatment. He was always enthusiastic on his subject and always dogmatic, totally regardless of opposition, confident in his theories and practice. Of his writings, however, I have always thought that his 'Clinical Lectures' were most typical of the man—examples of his great powers of observation and attention to clinical details. He often used to tell me that he rather dreaded giving a clinical lecture. He was more nervous when talking than when carrying out the most serious operation, and it cannot be denied that his house surgeons and dressers occasionally experienced difficult afternoons. He suffered from neuritis, and certain exacerbations of this trouble led to some irritability of temper. At such periods his wit, usually humorous, became caustic. The nursing staff also suffered on these occasions, but he often said to me, 'Yes, I know they hate me, but they always come to me when they want advice and treatment.' No one could hate him in reality; such sentiments were impossible, but he was sometimes feared by those who did not know him and who did not fully appreciate his kindness of heart. To those who knew him well he was always lovable, though such a word barely expresses one's real sentiments; he was too notable a character—veneration more accurately defines one's feelings.

All his cynical traits, however, were abolished after his marriage seven years ago, and he had three children whom he adored. He remained as keen on his work, as unsparing of himself and as great a teacher, but the strain of hospital routine began to exercise some effect upon him and he retired from active hospital practice two years ago. He meditated leading a quieter life, took a house in the West of England, and there spent as much time as his private practice allowed."

Mr. Lockwood was buried at Instow, on the North Devon coast, on Nov. 12th, in the presence of a large gathering of friends. Earlier in the week a memorial service was held at the Church of St. Bartholomew the Less, close to the wards and theatres in which he had worked. He will long be remembered as a great clinical teacher and a great personality.

Correspondence.

"Audi alteram partem."

IN AID OF OUR BELGIAN COLLEAGUES.

To the Editor of THE LANCET.

SIR,—The committee whose formation has already been announced in your columns is desirous of starting an immediate attempt to help the Belgian medical practitioners and pharmacists whose plight is so movingly represented by Professor Jacobs, as the delegate from a Belgian committee having similar aims.

The committee has made all preliminary inquiries, and has come to the conclusion that the most practical step which it can take at once is the despatch to Belgium in portable form of packets of medical and pharmaceutical material. These packets will be made up by Messrs. Burroughs Wellcome and Co. in accordance with an approved list, and will be conveyed to Belgium upon advice received from the American Ambassador and Mr. L. Hoover, the Belgian Minister, the manager of Messrs. Harrods, Limited, and Major Gordon, who has already done such good work as a medium for practical assistance between this country and Belgium.

The committee has already received promises of a certain number of subscriptions which justify it in making an experimental consignment, but it appeals to the medical and pharmaceutical professions in this country for funds to enable the Belgian medical practitioners and pharmacists to carry on their work effectually so soon as military and political circumstances permit.

We appeal also for surgical instruments; many of these, though not of the latest pattern, will be extremely valuable. The following are especially required: scissors, dressing and artery forceps, scalpels, syringes, and midwifery forceps. The instruments should be sent at once to the Master of the Apothecaries Society, Apothecaries Hall, Blackfriars, London, E.C., and any small adjustments required in them will be made.

Further, we want money to help the refugee Belgian doctors and pharmacists in this country, most of whom have nothing in this world left to them.

The intention is that the work of the committee shall develop, as the conditions of Belgium permit, and that the work shall be associated with corresponding efforts in Great Britain and Ireland, in the United States and other countries which are neutrals or allies in the war.

Subscriptions should be sent to the honorary treasurer, Dr. H. A. Des Vœux, 14, Buckingham-gate, London, S.W., and cheques should be crossed Lloyds Bank, Limited.—We are, Sir, yours faithfully,

RICKMAN J. GODLEE (*Chairman*).
THOMAS BARLOW,
President of the Royal College of Physicians of London.
W. WATSON CHEYNE,
President of the Royal College of Surgeons of England.
MEREDITH TOWNSEND,
Master of the Apothecaries Society.
W. J. WOOLCOCK,
Secretary and Registrar of the Pharmaceutical Society.
H. A. DES VŒUX (*Honorary Treasurer*).
DAWSON WILLIAMS,
Editor of the "British Medical Journal."
S. SQUIRE SPRIGGE,
Editor of "The Lancet" (*Honorary Secretary*).

Nov. 13th, 1914.

THE MEDICAL PROFESSION AND RECRUITING.

To the Editor of THE LANCET.

SIR,—I venture, with your kind permission, to draw attention to one way in which our general hospitals could render assistance at the present crisis in the vitally important matter of recruiting.

At the Leicester Royal Infirmary we have recently set aside a ward of 12 beds for the radical cure of hernia, varicose veins, varicocele, hammer-toe, and other physical disabilities removable by operation responsible under present conditions for the rejection of quite a number of keen and otherwise eligible recruits. Such patients only require, individually, a short stay in hospital, and as they have all expressed their intention to reapply for enlistment on recovery, a considerable addition will be made locally to one or other branch of the service. If this were done in a systematic way in the hospitals throughout the country I think a considerable result would be achieved.

May I also take this opportunity of respectfully suggesting that some definite instruction should be given from headquarters to medical officers examining recruits not to reject on account of varicocele (except in extreme form) otherwise eligible candidates? The different practice among different medical officers leads at present to inconsistency and individual disappointment, and prevents a considerable number of healthy and active men from entering the army. It seems a pity to disqualify, on the score of varicocele, a young man leading the active, laborious life of a farm labourer who, until he applies, is unconscious of any disability.

I am, Sir, yours faithfully,

C. J. BOND,
Vice-Chairman and Hon. Consulting Surgeon to the Leicester Royal Infirmary.

Leicester, Nov. 15th, 1914.

WESSEX DIVISION OF TERRITORIAL FORCE: APPEAL FOR MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—I beg to apply for the courtesy of your columns to make an appeal to the younger medical men in the six counties of Devon, Cornwall, Somerset, Dorset, Hants, and Wilts for candidates for the medical services of the Territorial Forces of these counties.

As is probably well known, the Territorial Force throughout the country has, by Lord Kitchener's orders, been duplicated, a reserve regiment or corps being formed in each instance to take the place of the original unit, now known as the General Service Unit. This necessarily entails a doubling of the medical officers throughout the Wessex Division. We require at present at least 31 medical officers to complete the establishments of the cavalry field ambulances, divisional field ambulances, and the various regimental units of yeomanry, artillery, engineers, infantry, and Army Service Corps.

The absolute need of an efficient medical service to maintain the health, control the sanitation, and in the event of battle succour the wounded of the troops need not be enlarged on here. Without an efficient medical service the best troops speedily lose their fighting value.

I am well aware of the severe strain which is now being thrown on our profession in coping in diminished numbers with the legitimate requirements of the civil population. But in the struggle in which the nation is engaged the needs of the army, both Regular and Territorial, are paramount, and I appeal therefore with confidence for more medical recruits. The chances of active service in connexion with these commissions are at least as good as in the case of the new army. The three General Service Wessex Field Ambulances have already been for some time at the front serving with the 8th Regular Division, and were indeed among the first Territorial troops to go there.

To save unnecessary correspondence I may state here that candidates for these commissions should be of sound health and active habits, and that in the case of field ambulances, and all except infantry units, they should be able to ride. Gentlemen who have previous service will, as far as possible, be gazetted to the rank they held on resignation. The ages at which commissions can be granted have been fixed by the War Office as under: Lieutenants should not exceed 40 years; captains, 45 years; majors, 50 years; and lieutenant-colonels, 57 years.

Candidates from the young and active members of the profession are particularly called for. I shall be glad to give any further information required.

I am, Sir, yours faithfully,

H. MACKAY,
Colonel, Army Medical Service.

Headquarters, Wessex Division T.F., Exeter, Nov. 16th, 1914.

LONG AND ANÆSTHESIA.

To the Editor of THE LANCET.

SIR,—In my brief note in THE LANCET of Oct. 31st I was not discussing the history of anæsthesia but referring only to Sir James Y. Simpson's relation to the subject. Long's claims are an old story, which anyone may read at length in Dr. Hugh Young's article in the Johns Hopkins Hospital Bulletin, Vol. VIII., p. 174. Everyone will, I think, agree with the following judgment of Professor Welch:—

"The honour of making the first trial of anæsthetic inhalation in surgical operations belongs to Dr. Crawford W. Long, a respected and honorable country doctor, then living in Jefferson, Jackson County, Ga., who, in March, 1842, removed painlessly a small tumour from the neck of James M. Venable, anæsthetised by ether. He seems to have performed at least eight minor surgical operations during the next four years upon patients under the influence of ether. Dr. Long is necessarily deprived of the larger honour which would have been his due had he not delayed publication of his experiments with ether until several years after the universal acceptance of surgical anæsthesia. It is also to be regretted that his published details of the mode of administering the ether and the depth of the anæsthesia are so meagre and unsatisfactory. While the accepted rule that scientific discovery dates from publication is a wise one, we need not in this instance withhold from Dr. Long the credit of independent and prior experiment and discovery, but we cannot assign to him any influence upon the historical development of our knowledge of surgical anæsthesia or any share in the introduction to the world at large of the blessings of this matchless discovery."

Surgical anæsthesia as a practical procedure dates from Oct. 16th, 1846, when William Morton, in the Massachusetts General Hospital, Boston,

gave ether to Gilbert Abbott, upon whom Dr. John Collins Warren performed a painless operation.

I am, Sir, yours faithfully,

Oxford, Nov. 16th, 1914. WILLIAM OSLER.

INTRATRACHEAL ANÆSTHESIA.

To the Editor of THE LANCET.

SIR,—In relation to Dr. R. L. Jones's account of my cases of intratracheal anæsthesia in THE LANCET of Nov. 7th, there is one point which perhaps requires a further note. In one case of excision of the tongue the patient died from pneumonia, and this would seem to show that this method of anæsthesia is therefore no safeguard against this complication. But it ought to be pointed out that the mouth was very foul owing to the fact that the ulcerating growth had extended far back. The whole tongue was removed, so that the epiglottis stood up at the back of the floor of the mouth. I never saw a case in which post-operative shock was less marked, and the patient was sitting up reading the paper the day after operation. Nevertheless, he died a week later from septic pneumonia. I believe that this is accounted for by post-operative infection and not by inhalation of blood during the operation.

I am, Sir, yours faithfully,

ERNEST W. HEY GROVES.

Richmond Hill, Clifton, Bristol, Nov. 10th, 1914.

THE WILLIAM LANGLEY MEMORIAL FUND.

To the Editor of THE LANCET.

SIR,—A year ago you were good enough to announce that my bankers (Sir Charles R. McGrigor and Co.) would receive subscriptions from members of the West African medical staff to the above fund. I now beg to state that the sum of £47 5*s.* 9*d.* was thus collected and has been transferred, with a list of subscribers, to the Bank of British West Africa, Leadenhall-street, E.C., for the credit of the main fund, which is under the control of the committee at Lagos, Nigeria.

I understand the fund will be disposed of as follows: First, a brass tablet in the colonial church at Lagos in memory of Mr. Langley. Second, a yearly gold medal to be competed for at the schools of tropical medicine.

I am, Sir, yours faithfully,

J. P. FAGAN,

Kensington, W., Nov. 15th, 1914. (Late P.M.O., N. Nigeria.

ROYAL DENTAL HOSPITAL OF LONDON SCHOOL OF DENTAL SURGERY.—The prizes were distributed to the successful students on Nov. 17th by Mr. Arthur Hood, chairman of the committee of management.

THE LADY DUFFERIN FUND.—Sir Harcourt Butler presided at a meeting of the central committee of the Dufferin Fund, at Gorton Castle, Simla, on Oct. 13th. The following were present: Sir Reginald Craddock, Sir Pardey Lukis, Raja Sir Harnam Singh, Sir James Roberts, Dr. K. A. Platt (of the Women's Medical Service for India), and Mr. G. A. Hanrahan, officiating joint secretary. The central committee of the Dufferin Fund has taken over the control of the regular service of qualified medical women recently sanctioned by the Government of India. The service is now at full strength and its members are all appointed to important centres throughout India and Burma.

THE POSITION OF BELGIAN DOCTORS AND PHARMACISTS.

BY PROFESSOR C. JACOBS,
OF THE UNIVERSITY OF BRUSSELS.

BELGIUM, a blood-stained and ruined country in the horrors of despair, claims the help of her friends to whom her freely consented sacrifice has brought a ray of hope in the dreadful nightmare of the past three and a half months.

I raise my voice with a feeling of intense pity on behalf of thousands of our weeping brethren in their Calvary of suffering, but it is my pride to carry out this duty to my country. The first impulse of the Belgian medical world is to make an appeal to Great Britain, whose kindness has proved itself in such unbounded measure and with such tact and generosity. The German iron fist has closed upon our country; we have to witness the endless series of crimes that are committed in all our provinces, and we have to abide in silence. All the evils of war have been thrust upon us at the same time—a useless and cruel holocaust of human lives, a decimated, despairing, and starving population, ruined homes, and, far worse than all, our children, the only hope of our country, are being mown down by want and disease.

Our doctors have not been spared; they, too, are bearing a heavy share of the general suffering. And now long weeks, nay months, of trial stand before them, during which they know that they will have to bear a terrible burden. They will have to devote themselves untiringly, giving all their care and time, and even their lives, if need be, to the cause of their country; and yet many of them, victims of a barbarian foe, are homeless, deprived of their laboratories, instruments, and their medical stores. What will become of those that still remain of our people, threatened as they are by the grim havoc of war and by contagious disease, its constant follower?

In anticipation of these inevitable consequences it has become my duty, as the spokesman of my Belgian colleagues, to appeal to the medical and pharmaceutical world that an impulse of international fraternity may come to the aid of Belgian doctors and pharmacists. Is it realised what we in Belgium have suffered and are suffering? Duty, and duty only, has bound our doctors and pharmacists to their posts in the devastated localities; some of them are carrying on their profession in the ruined remains of destroyed buildings, whereas others have to improvise at haphazard any kind of shelter for their Samaritan work. Need I describe the manner in which they sustain themselves and how they manage to nourish their wives and children?

I have witnessed such misery amongst them! Some have had to work as navvies in order to have a few pence in their pockets; others have told me that they had not seen bread for a fortnight, but had lived exclusively on potatoes. Others had a meagre bunch of straw laid on the bare ground as a bedstead; the only pair of boots owned by one of them was falling to pieces in tatters. Men I

have seen were dressed in torn garments and their children were in rags. One of my colleagues had to live on wayside herbs for three days and three nights and his wife shared his fate! A professor of a university, bereft of everything, was, when I saw him, in dire want of a bed, and another of equal academic standard was wandering haggard over the countryside, searching in vain for a beloved family. And some of our ranks have been taken as hostages, others have been shot, and their widows and orphans have been left deprived of everything.

This description presents a genuine picture of the distress of the Belgian medical profession, but when these educated people are struck down by want they will never beg for charity: it must be brought to them. It is impossible to calculate how many of them are in this sore distress, and some have been so for days and weeks, but it is easy to see that the distress must be very widespread. Considering now the medical men only, Belgium contained 4800 doctors; the number of localities that have been destroyed is roughly as follows:—

Province of Brabant.—Londerzeel, Merchtem, Capelle-au-bois, Kotselaar, Wildouck, Cortenberg, Gelroode, Nieuwenrode, Wavre, Eppeghem, Beyghem, Ottignies, Mousty, Louvain, Jodoigne, Linsemaux.

Province of Limbourg.—Haelen, Lanacken, Tongres (partly).

Province of Liége.—Liége (partly), Mouland, Bermont, Visé, Micheroux, Batisse, Herve, Hermée, Milmont, Flemalle, Francarchamps, Lincent, Huy, Seilles.

Province of Namur.—Namur (partly), Bierwart, Narille, Tamines, Faliseulle, Andenne, Spontin, Evrehailles, Houx, Yvoir, Dinant, Bovinure, Anhage, Hartiere, Sommière, Walcourt, Mariembourg, Dourbes.

Province of Hainaut.—Charleroi (partly), Montignies, Morlanwelz, Gouy-les-Piéton, Lobbes, Beaumont, Frameries (partly), Merbes, Jemappes, Quaregnon, Marchienne.

Province of Luxembourg.—Rossignol, Etalle, Ethe, Florenville, Virtey, Arlon, Neufchateau, St. Hubert, Anthee, Arsimont, Marche, &c.

The deserted province of Antwerp and both the provinces of Flanders have been battlefields since one month, with the great struggle raging round Dixmude, Nieuport, Courtrai, Middelkerke, Ostende. What remains of those places to-day?

Each of those localities has its doctors and pharmacists, and at least 1000 of the doctors are now absolutely poverty-stricken, and 2000 to 3500 doctors are suffering cruelly through this war. We had 1800 pharmacists all over the country, and at least 300 of them are unable to earn their living, and all of them, with very few exceptions, are deprived of the most necessary trading stock. I dare say that my estimate is below reality.

Consider the immense suffering that our medical brethren have gone through and are still going through. Their pathetic and lamentable distress should unite all in the desire to relieve it. These practitioners have given a lesson to the world of unfaltering energy, but now their breaking courage will have to be kept up. In this emergency I call on the medical profession of England to rally to our help. It will be for us a great debt of honour and of eternal gratitude.

THE WAR.

The Casualty List.

The following casualties among officers in the Royal Army Medical Corps and Indian Medical Service serving with the Expeditionary Force have been reported since our last issue:—

Killed: Captain Ernest Mure Glanvill, R.A.M.C.; Captain Angus McNab, R.A.M.C. (T.).

Died of Wounds: Captain Thomas McCann Phillips, R.A.M.C.; Captain Charles Paget O'Brien-Butler, R.A.M.C.; and Lieutenant M. Richardson, R.A.M.C.

Wounded: Major F. S. Irvine, R.A.M.C.; Captain H. S. Dickson, R.A.M.C.; Captain A. E. Grisewood, I.M.S.; Captain W. F. M. Loughnan, R.A.M.C.; Captain K. Comyn, R.A.M.C.; and Lieutenant L. R. Shore, R.A.M.C.

Wounded and Missing: Captain A. M. Rose, R.A.M.C.

Missing: Lieutenant J. G. Butt, R.A.M.C.; Lieutenant N. M. Mehta, I.M.S.; and Lieutenant H. G. Winter, R.A.M.C.

Captain C. W. Holden, R.A.M.C., and Captain A. A. Meaden, R.A.M.C., previously reported wounded and missing; Captain R. V. Dolbey, R.A.M.C., and Captain R. A. Flood, R.A.M.C., previously reported missing; and Captain W. P. Croker, R.A.M.C., are now unofficially reported prisoners of war.

Captain H. S. Ranken, V.C.

In the first list of nine officers and non-commissioned officers to whom the Victoria Cross has been granted for conspicuous bravery while serving with the Expeditionary Force appears the name of Captain Harry Sherwood Ranken, R.A.M.C., who died at Braisne on Sept. 25th from wounds received in action. Captain Ranken, whose obituary notice appeared in our issue of Oct. 24th, was awarded the Victoria Cross "for tending wounded in the trenches under rifle and shrapnel fire at Hautvesnes on Sept. 19th, and on Sept. 20th continuing to attend to wounded after his thigh and leg had been shattered."

The Surgery of the War from the French Standpoint.

We have published many articles from the pens of British surgeons on their experiences of the war. The views of an eminent French surgeon will therefore be of all the more interest. At the Académie de Médecine of Paris M. Tuffier, who had been sent by the Minister of War to inspect the arrangements for the treatment of the wounded of our gallant Allies from the fighting line in the Vosges to the base hospitals, has given his conclusions. He considers the superiority of antiseptic over aseptic treatment incontestable and the drainage of infected wounds a procedure which nothing equals. The conservation of wounded limbs, a practice defended by the French school against amputation recommended by the Germans, is adopted in all the hospitals, but discrimination is necessary because of the dangers of emphysematous gangrene and septicæmia. M. Tuffier finds that in general the gravity of wounds increases progressively according as they are due to rifle bullets, shrapnel, or shell fragments. The

gravity of the wounds produced by the last and the dangers of gangrenous ▸septicæmia and tetanus make him regard immediate extraction of the fragment as indicated when this can be easily done. Compound fractures of limbs, other things being equal, are graver the nearer they are to the trunk, especially in the femur. Bullet wounds of the chest which come under treatment in hospitals have proved remarkably benign; cases of hæmothorax necessitating operation are exceptional. M. Tuffier was shown cases of large apertures of exit of projectiles as evidence of the use of explosive bullets. This charge is constantly being made by all the armies engaged in the war and has been discussed in our columns. It has been levelled against the Allies by the German press. M. Tuffier gives the explanation of many injuries attributed to the use of explosive bullets. The terrible wounds are due, he says, to the bursting on a bone of the hard envelope of an ordinary bullet or to the carrying away of a piece of bone—an explanation with which all experts are agreed. The use of a bullet prohibited by the rules of warfare can be proved only by the finding of such in the possession of a soldier. On the field of battle French "first aid" consists in the "parsimonious" application of tincture of iodine to the wound, an aseptic compress, a little cotton-wool, and a bandage. These are often alone sufficient in the case of simple wounds to ensure healing. In the field hospitals are retained the cases too serious to be sent to the base hospitals—wounds of the abdomen and chest, fractures of the upper third of the femur, and cases of hæmorrhage. M. Tuffier insists that in these hospitals there should be skilful surgeons capable of rapidly seizing the opportunity of performing any operations which may be necessary and which the organisation and equipment permit. But he does not think that laparotomy and suture of the intestine for abdominal wounds can be performed with any chances of success in a place where operations are being performed on septic cases, and where time is wanting. However, if percussion shows a large intra-abdominal effusion—a frequent condition—suprapubic incision under local anæsthesia and drainage may be performed. The usual treatment of abdominal wounds is to place the patient in the sitting posture, for him to abstain from all food, and to maintain these conditions until arrival at a completely equipped hospital. The treatment of tetanus—a frequent complication from contamination of wounds by the soil—should, M. Tuffier says, be preventive. The surgeon should endeavour to destroy on the first dressing any germs which may have gained access to the wound and should inject antitetanic serum as soon as possible. The urgency of the latter measure is shown by the case of an officer wounded in the battle of the Aisne by a fragment of shell which tore away all the metacarpal bones. Although he was injected on the second day after the injury, symptoms of tetanus appeared five days later and he succumbed. The most frequent grave complications are infections of fractures and wounds of joints, particularly of fractures of the upper third of the femur. In such injuries removal of projectiles and pieces of garment carried in by them and of free bone splinters and drainage should be carried out. The most serious complication is emphysematous gangrene, which should be treated at its onset by the actual cautery and injections of hydrogen peroxide.

MEDICAL PREPARATIONS FOR WAR IN THE OVERSEAS DOMINIONS.

At such a time as this the medical man is peculiarly fortunate. Little or no military training is necessary for his conversion into a serviceable member of His Majesty's army. It is therefore not surprising to find that the medical men of Britain beyond the seas are displaying in their own particular way that enthusiasm to serve which is one of the most remarkable features of this world-wide crisis. The Canadian medical journals are full of evidence of this spirit. Name after name is given of medical men who have volunteered for service. Not the least remarkable of these is that of Dr. J. G. Adami, professor of pathology in the McGill University, who has volunteered for service as a private. From the *South African Medical Record* of Oct. 10th we learn that the practitioners of the Orange Free State and Basutoland have made arrangements for working the practices of those called up by the mobilisation orders, so that they may suffer a minimum of loss. This journal comments favourably upon this step, and advocates its adoption throughout the Union. In a leading article entitled "Volunteer!" the *Medical Journal of Australia* details the steps already taken to provide the next Australian Expeditionary Force with a medical service. Behind the regimental medical officers with stretcher-bearers in the firing line there are light horse field ambulance wagons—an Australian device. Behind these, again, are the field and base hospitals. The personnel needed to man this organisation must include 92 medical officers. To this number must be added 60 medical men who have already volunteered for service with the first Expeditionary Force, and approximately 100 needed for the navy and for the Army Medical Reserve Corps on duty in Australia. The total number of medical men will therefore be about 250, actually about 10 per cent. of the whole Australian profession. This is a very remarkable figure, and one of which our Australian colleagues may indeed be proud. But the editor of the journal is not quite satisfied with it. He urges upon all those who are not serving their Empire in this direct manner the need for caring for those patients at home whose medical men have gone to war.

A VISIT TO CALAIS AND DUNKIRK.[1]

Our Special Sanitary Commissioner, who has been detailed for official work overseas, sends us the following account of a visit to Calais and Dunkirk:—

Calais, Nov. 11th.

No continental landing stage is better known throughout the world than the Gare Maritime at Calais. Whether the traveller from England is bound to Paris or Petrograd, the Italian lakes or the Black Sea, Egypt or India, he will in all probability land at Calais. But what a changed Calais it is in which I find myself to-day. There is no Dover boat, and no travellers for business or pleasure; there are no tourists. There is but one solitary passenger boat, which arrives late in the evening, and comes from Folkestone, not from Dover, and the vast majority of those on board are not passengers in the usual sense of the term. They are Belgian soldiers who have recovered from their wounds, or Belgian conscripts or volunteers, one and all going to join their regiments. The few English or other passengers, the rare travellers who have actually paid for their fare, are connected with the Red Cross, or, in any case, are going over

[1] This article has been submitted to the Press Bureau, which does not object to its publication, as censored, and takes no responsibility for its correctness.

for some grim war purpose. The polite stewards and helpful sailors, always anxious to render some small service in anticipation of a disproportionately large gratuity, have disappeared, as also the smartness and tidiness of the ship. Soldiers are lying on the decks, playing cards, smoking everywhere. The scene is more like a rough bivouac than a luxurious Channel passenger steamer. Nor did we get aboard the ship in the old easy way. In the train from London a yellow card has to be filled up stating where the traveller is going and why he is going there. On leaving the train at Folkestone he presents this card, which is kept by the authorities, while he shows his passport. This document, with proper *visé*, has to be shown again, and perhaps several times, before he can go on board, and, of course, before he is allowed to land at Calais.

Military Occupation of the Calais Landing Stage.

Only dim lights are to be seen on the once brilliantly illuminated Calais landing stage. On entering the station building, instead of ticket collectors, we found Red Cross nurses, wearing their aprons, a white cloth to cover their hair, and in every other way ready to dress wounds and give help to the sick or wounded. And any number of Belgian soldiers crowded the station. The French Custom House officials had nearly all gone to the front; no one took the trouble to inquire about or look into my handbag. On the other side of the station the lines looked blank and deserted. There was not a train to be seen anywhere, and there was neither a carriage nor even a hand truck in which to wheel luggage along. Such commodities were, I was assured, superfluous, as there was not a bed to be had in the town, so it was no use going to inquire about one. To judge by the condition of the hotel adjoining the Maritime Station the report seemed true, while the station was full to overflowing, and every box, case, hamper, or bale of goods was being used as a seat, and every corner where it was possible to squat on the ground was already occupied by weary Belgian soldiers. The position was awkward, as I was accompanying a lady doctor and nurse, and felt responsible for their well-being. Fortunately a Belgian officer remembered having met me at an international congress, and as soon as I had someone in authority to intercede in our favour I felt reassured. In the end we were allowed to grope our way through the darkness back on board the ship we had travelled in. There were no beds but small state cabins where we slept on hard couches.

Calais as an "Evacuated" Town.

The next morning an eminent Belgian surgeon came to our rescue and conveyed us to the town in his ambulance motor. The doctor was under orders to proceed to another part of France, the nurse was then and there taken to a new hospital in course of formation, and I found an hotel where they allowed me to occupy for one night the room of an officer who was at the front. As for the following night, that would depend if some other room became vacant and if I succeeded in obtaining permission to remain in Calais, for I was in this unenviable position that I could not stop more than 24 hours without a permit, nor could I leave the town without a permit. My passport was no use in itself, but only of use in getting the necessary documents.

Calais, like Dunkirk, is legally speaking an "evacuated town," yet it contains such a crowd that it is almost impossible to find a bed, and at the hotels people are sleeping on sofas, on the floor, or on billiard tables. The fact is that while the presence of ordinary travellers is not allowed there are any amount of soldiers and of Belgian refugees. Indeed, the majority of the population of Calais consists of Belgian soldiers and Belgian fugitives. The famous city has been made over to the Belgians as Boulogne has been selected for the English. Belgian gendarmes, fully armed, pace the streets in couples, instead of the ordinary French police. If asked the way, they reply they are strangers and have no knowledge of the town. If after trying the public authority in vain I applied to an ordinary civilian the result was likely to be the same. He also generally proved to be a stranger, a Belgian just escaped from the devastation of his own country. Under these circumstances I did not find my way easily to the hospitals and the medical men whom I wanted to see.

Great delay, combined with a considerable amount of physical discomfort, is caused by the obligation to obtain from the Military Governor of Calais a special written permission for nearly every action, but considering the critical military circumstances of the campaign and the knowledge that Calais is the direct object of furious attack, we can wonder at no precautions—all are justified. That the permit to remain in or to go out of the town must be secured on each occasion is reasonable. Every telegram must be written in French and bear the stamp of the military governor before the post will accept it. This means constant visits to headquarters, where there is no waiting-room. Here I permit myself a grumble. The precautions I accept as necessary, but I think that the convenience of the public might be studied a little more. A large and mixed crowd stands in the street till the authorities have sanctioned or refused the request made in writing and which sentinels carry in. It may be necessary to wait for more than an hour, without a seat, exposed to all weathers. Among the crowd there are many women, some with children in their arms and some with infants at their breasts. I could not but think that such exposure if unnecessary was cruel and dangerous. An awning, at least, might be provided or a large tent put up in the yard beyond the entrance, with seats and a stove inside. The perpetual excuse made that "this is war," or in French, "*à la guerre comme à la guerre*," is all very well at a moment of emergency, but several weeks is more than a moment, and there has been plenty of time to show some consideration for the hundreds of people who are daily compelled to stand and wait in the street.

The Transport of the Wounded to England.

As far as possible all the English wounded are sent to Boulogne, though some British wounded have strayed into Calais. The plan is, however, that all the Belgian wounded shall be sent to Calais and thence to England if well enough to travel. At first there is no doubt that some wounded were put on board who were not fit to travel, especially by sea, and a few did not survive the fatigue of the journey. Consequently efforts were made to increase the hospital accommodation at Calais so as to retain a larger number before exposing them to the risk and fatigue of crossing the Channel, with the chance of adding sea-sickness to all their other sufferings. It is most unfortunate that the new station, now in the course of building on the Admiralty Pier at Dover, is not terminated. But the organisation by which the transport is made works perfectly.

The Enemy at the Door.

Of course, if the Germans captured Dunkirk, Calais, and Boulogne the whole situation with regard to the wounded would be altered at once, and those who not long ago were so fiercely critical of the treatment of the wounded did not recognise what military exigencies demanded. I was struck with the calm confidence of everyone at Calais when the enemy was indeed at the gate. When the Prussian Guards made their notable effort to reach us by attempting to break through the line of defence at Ypres no one appeared nervous. At Dunkirk, which was much nearer and where I proceeded the day after this tremendous onslaught, there was a ghastly accumulation of wounded, but no fear. The aeroplanes dropped bombs and killed women and children in Dunkirk. The German troops had approached a little nearer the day that I was there, for they occupied a part of Dixmude, which is reached from Dunkirk in a motor in less than an hour; but at Dunkirk, as at Calais, the utmost confidence and calm prevailed. We were all far more anxious about the wounded than about the Germans. We felt, and felt keenly, that the best was not being done for the wounded; but our faith in the Belgians, the British, the French, and the Indian soldiers, who were holding the trenches only a few miles away, was absolutely unbounded. Had they given way our lives would have been in the gravest peril. The German shells would have crashed into our hospitals as they have so often done before, and we could not possibly have removed all the wounded in time to save them from an enemy that was barely 20 miles away.

Hospital Requirements at Calais.

To return to the situation at Calais, there are things that need to be said, in my opinion and in the opinion of those whom I consulted on the spot. It is necessary to understand that the hospital base for the Belgian army is in England, and that Calais is only the port of embarkation. Therefore, the wounded are only retained in Calais when the injury they have received is so great that it would be dangerous

to send them over to England. Consequently and happily there are not many wounded in Calais, so that there is not a pressing demand for either surgeons or nurses. Indeed, there are many army surgeons in Calais who have little or nothing to do. Highly skilled nurses are more needed, but what is specially required are one or two exceptionally distinguished and experienced surgeons. Surely there need be no trouble about this, if I am right; and whether I am right or wrong could be found out by the briefest inquiry. And if the services of a few additional surgeons of high experience are wanted the need can be met without giving offence to anyone if the right steps are taken. There are desperate surgical cases at Calais that can only be saved by the exercise of high technical skill, and the presence here of one or two consultants not attached to any one particular hospital, but whose help could be secured for the worst cases in all the hospitals, without giving offence to the regular staff of those hospitals, would be of the highest value. It will be easily understood that as most of the cases are shipped off to England, what remains differs altogether from the average practice of field and base hospitals. The susceptibilities of three nationalities have to be considered, I am aware, but I have too good an opinion of them and of our own officials to imagine that questions of pique would arise. It is true that to avoid this Calais has been allotted to the Belgians as Boulogne to the British. Nevertheless, the Union des Dames de France has a French hospital, and the British Red Cross Society has an English hospital both in different parts of the same building in Calais. Also, though there is a vast predominance of Belgian wounded at Calais, it has been impossible to exclude altogether French and British wounded. In the same way the surgeons and the nurses belong to the three nationalities, with a small sprinkling of volunteers from Russia and other countries. It needs some diplomacy to make all these heterogeneous elements work together.

OBITUARY OF THE WAR.

ANGUS MACNAB, M.B., CH.B. EDIN., F.R.C.S. ENG.,
CAPTAIN, LONDON SCOTTISH REGIMENT.

Captain Angus MacNab, who was ophthalmic surgeon to King Edward VII. Hospital, Windsor was killed in the first engagement of the London Scottish Regiment whilst serving in a medical capacity. He was a brother of the Hon. Robert MacNab, formerly Minister of Agriculture in New Zealand. He graduated in arts at Otago, New Zealand, and in medicine at Edinburgh University. Subsequently he devoted himself to ophthalmology and studied at the Moorfields Eye Hospital, where he became a chief clinical assistant, and at Freiburg and Vienna. At the time of his death he was clinical assistant in the ophthalmic department of Charing Cross Hospital. MacNab was a man of great energy and acumen. His facility in learning the German language much impressed Professor Axenfeld when he was working in Freiburg. He translated Axenfeld's "Bacteriology of the Eye"—the standard work on this subject—and Lohmann's "Disturbances of the Visual Functions." He, who so fully proved his appreciation of the benefits of German science, fell a victim to *Kultur* in its most repellent form. A report by a motor-cyclist despatch rider says he "was actually bayoneted in front of their eyes whilst bending down attending to two wounded men. It was bright moonlight, and he had a white badge and Red Cross on his arm and even a blue tunic on, so as to be absolutely unmistakable, and was of course without arms of any sort." It is by such dastardly deeds that we learn that *Kultur*, which once stood for civilisation, now means ultra-barbarism.

CHARLES PAGET O'BRIEN-BUTLER, L.R.C.P. & S. IREL.
CAPTAIN, ROYAL ARMY MEDICAL CORPS.

Captain Paget O'Brien-Butler, who has died of wounds received in action, was the son of the late Major Butler, formerly a racing official in Ireland. O'Brien-Butler received his professional education in Dublin, and took the Licences of the Royal Colleges in 1905. He soon entered the Royal Army Medical Corps. Both before and after qualification O'Brien-Butler was one of the best known amateur riders in Ireland. In 1907 he topped the amateur riders' list. At some meetings he rode every winner of the day. On going to India he became equally famous as a rider. As lately as August 5th in the present year he rode a race at Galway, leaving immediately afterwards for active service. O'Brien-Butler was very popular as a rider; he was plucky and clever, and was recognised as a thoroughgoing sportsman.

THOMAS MCCANN PHILLIPS, M.B. R.U.I.,
CAPTAIN, ROYAL ARMY MEDICAL CORPS.

News has been received in Belfast of the death of Captain T. McCann Phillips in No. 4 Clearing Hospital, Flanders, from wounds received in action. A son of the Rev. J. G. Phillips, of Damascus, who married a Belfast lady, the late Captain Phillips received his early education in Trent College, Nottingham, and in Campbell College, Belfast. He studied at Queen's College, Belfast, and in 1905 graduated M.B. of the Royal University of Ireland. He was a house surgeon at the Royal Victoria Hospital, Belfast, and shortly afterwards entered the Army Medical Department, gaining first place at the examination. He was home on leave from India when the war broke out, and was posted to Victoria Barracks, Belfast. Although only sent to the front on Oct. 3rd he had seen some desperate fighting, especially round Ypres, being continuously in the firing line during his tragically short service. Captain Phillips was most popular, a good athlete, a man of decided ability, and very kindly and sympathetic. He was unmarried, and great sympathy is felt for his mother, who is a widow, and for his brother, Dr. Walter Phillips, who is a lecturer in the Union Medical College, Moukden.

JAMES HENRY DIGBY WATSON, M.B., CH.B. EDIN.,
TEMPORARY SURGEON, ROYAL NAVY.

J. H. Digby Watson, who lost his life while serving as temporary surgeon in H.M.S. *Hawke* when she was torpedoed on Oct. 15th, was born on August 31st, 1890. He was the son of Engineer-Captain Watson, R.N., and was educated at King's School, Canterbury, Edinburgh Academy, and the University of Edinburgh. At school and college he soon made a name for himself as an all-round athlete, and last winter when he was working at the London Hospital he gained his Rugby International cap for England, playing with great success as a three-quarter against Scotland at Inverleith. He was also a good cricketer, boxer, and high jumper; while in 1912 he won the long jump in the Scottish inter-university sports and in the international athletic contest between Scotland and Ireland. He obtained his medical qualifications at the close of last year, graduating M.B., Ch.B. in the University of Edinburgh on Dec. 17th, and joined the *Hawke* at the beginning of August. His cheerful disposition and independent character, as well as his athletic prowess, endeared him to many friends, and his death at the early age of 24, while in his country's

service, is one of the many tragedies of the present war.

THE BRITISH RED CROSS SOCIETY.—The summary of the work for the week ending Nov. 17th states that the number of hospitals accepted by the War Office to date is 417, containing beds for 12,749, including 1019 beds accepted during the past week, and distributed among the Army Commands as follows: London, 795; Southern, 3865; Aldershot, 687; Eastern, 3507; Northern, 2034; Western, 1654; Irish, 207. A number of Red Cross Voluntary Aid Detachments are being utilised in connexion with these hospitals. The Weir Hospital, Balham, which has been taken over by the Kensington Division of the British Red Cross Society, has been inspected and approved. Viscountess Ridley's house in Carlton House-terrace, and Evelyn Lady Alington's house, 41, Portland-place, have been inspected with a view to their being converted into hospitals for officers.

At the Netley Red Cross Hospital 300 beds are now available. Three orderlies' huts are nearly completed, and the large dining hall for patients will be ready on Nov. 25th. Her Majesty Queen Alexandra has been graciously pleased to present 400 yards of lawn muslin for puggerees for the wounded Indian soldiers. Messrs. Liberty and Company have also given 420 yards of material for puggerees. There are to-day 153 British and 60 Indian patients in the hospital.

Motor ambulances have been coming in. From noon on Tuesday, the 10th inst., until to-day 50 ambulances and cars and two lorries have been despatched. A falling off has occurred in despatch during the last two or three days of this week owing to the congestion of cars at Folkestone. These could not be shipped over owing to the heavy seas.

Nurses have been posted for duty in Home Military Auxiliary Red Cross Hospitals as follows: Nov. 11th, Sturminster Marshall, 1; Milton Hill Hospital, Abingdon, 1; Nov. 12th, Waverly Abbey, Farnham, 1; Exeter, 1; Nov. 13th, Stourbridge Red Cross Hospital, 3; Nov. 14th, Clandon Park, 1; Beckett Hospital, Barnsley, 2; Louth Hospital, Lincolnshire, 2; Hon. Mrs. R. Lindsey's Officers' Hospital, 2; Southampton Docks Red Cross Hospital, 1; Nov. 16th, Countess of Normanton's, Ringwood, 1; Bighton Wood, Alresford, 1; Frinton-on-Sea Red Cross Hospital, 2; St. John's Hospital, Abbeydale, Sheffield, 1; Nov. 17th, Countess of Normanton's, Ringwood, 1; Brentwood, Essex, 1; making a total of 22.

The following stores have been despatched during the past week: 1002 cases of goods to France, and 271 have been distributed in England, while 90 home hospitals have also been supplied. Medical stores to the value of £3500 have been purchased. The increase on this account has arisen owing to the special consignment sent to the British Red Cross Hospital at Netley. 28,465 garments and pieces of linen have been received, while 39,139 articles have been despatched. The number of gifts of garments and linen shows a great falling off, and it is hoped that a more ready response will be forthcoming with these requisites.

A large number of personal inquiries continue to be received with regard to prisoners of war, but the society has only been able to satisfy a small proportion of these. Daily communication is maintained with Geneva and with Sir Walter Lawrence at the Prisoners of War Bureau.

The society has issued full rolls of Voluntary Aid Detachments mobilised up to Nov. 17th, of British Red Cross detachments employed but not mobilised, and of personnel posted for duty abroad.

THE BRITISH MEDICAL ASSOCIATION AND THE BELGIAN MEDICAL REFUGEES.—Many communications have been received at the central office of the British Medical Association from members of the medical profession who are anxious to provide hospitality for Belgian medical men and their families at present in this country. The Medical Secretary has offered to the War Refugees Committee at Aldwych the use of the office of the Association as a clearing house, collecting through the *British Medical Journal* the names of medical men wishing to offer hospitality, inquiring as to the nature and extent of the offers made, and transmitting the particulars to the War Refugees Committee. Lord Gladstone has welcomed the coöperation of the Association. Medical men, or the wives of medical men, who are willing to offer hospitality to Belgian medical men and their families are invited to write to the Medical Secretary of the Association stating what hospitality they are prepared to give, and any such offers will be dealt with as promptly as possible. The refugees themselves greatly prefer to be dealt with as families and not as individuals, and this has been adopted as the general policy of the War Refugees Committee.

MILITARY MEDICAL ARRANGEMENTS IN AUSTRIA-HUNGARY.—The American medical profession is not content to stand aside with folded hands watching the wholesale slaughter that is engrossing Europe. It is true that one or two of the medical journals, like some of the lay periodicals of America, are adopting a rather supercilious attitude of virtuous surprise at the madness that has possessed the Old World; presumably these journalists are too young to know anything of the internal struggle that convulsed the United States only 50 years ago. These are, however, in a minority. The general attitude of the American, whether doctor or layman, is one of anxiety to alleviate suffering. Among their many efforts in this direction—efforts which the armies on both sides most gratefully acknowledge—is to be included the despatch of two Red Cross units to Austria-Hungary. These reached Vienna *viâ* Rotterdam on Oct. 14th, one being retained there while the other went on to Budapest. Count Rudolf Traun, who welcomed them on behalf of the Austrian Red Cross Society, said that America was the only neutral country sending medical and surgical help to the European combatants. "A report received from Budapest on Oct. 21st," says the *Boston Medical and Surgical Journal* of Oct. 29th, "states that the American Red Cross unit assigned to that city has been put in charge of a hospital of 180 beds in the Wechselmann Institute for the Blind." It appears, further, from their report that the capital of Hungary is flooded with wounded soldiers who continue to arrive daily in trainloads. (It should be recollected that the battle front in Galicia is about 300 miles distant from Budapest, while the Austro-Serbian line of contact is about 200 miles away.) A new military hospital just opened has 3600 beds, and another barrack hospital has been started which will accommodate 4000 sick or wounded. To meet the immense demand for medical men created by this influx of wounded the Ministry of Education has agreed that students in their fourth and fifth years entering the military hospitals may count the time as a portion of their hospital year. At Trieste and other towns in Southern Austria large numbers of wounded are being received. Convalescent soldiers sent home on furlough are said to be without means of subsistence, so that, in addition to their ordinary pay, the War Office has found it necessary to give a daily sum of 70 kreuzers (about 1*s.* 3*d.*). Italian newspapers state that cholera is rife in Galicia and Hungary, but this happily is unconfirmed as yet.

ACCOMMODATION FOR WOUNDED SOLDIERS IN DUBLIN.—The last party of wounded which arrived in Dublin has exhausted the accommodation available in the Dublin hospitals. Moreover, the nature of the wounds is such that the pressure is not likely to be relaxed for some time. Acting on the advice of Surgeon-General Anderson, the City of Dublin Branch of the British Red Cross Society has decided to make the provision of further accommodation for wounded soldiers its first task. It is believed that at least 500 beds will be required in the near future. Several alternative schemes have been under discussion by the committee. It was suggested to erect temporary buildings in some open space such as Phœnix Park; on the other hand, it was suggested to obtain some public building for use as a hospital, or to make the necessary changes in a row of houses; finally, it was suggested that temporary buildings should be erected in connexion with the existing general hospitals. Many of these institutions are possessed of vacant spaces of land adjoining their present buildings, and it should be possible to find space for 500 beds in this way without difficulty. The last-mentioned proposal received most support. It was felt that it solved at once all the questions of management and staff which would arise if a new hospital were erected. A small committee was appointed to get into touch with the hospitals and find what space they had available, and whether they would coöperate in the carrying out of such a scheme.

CARE OF THE WOUNDED IN SCOTLAND.—The arrangements for the distribution in Scotland of the wounded to auxiliary hospitals and convalescent homes, which was under control of the central registry under Major Tudor Craig, have now been discontinued, and the work has been entrusted to the Scottish branch of the British Red Cross Society. The military authorities have also announced that wounded will only be sent to auxiliary hospitals and convalescent homes which have obtained the sanction of the society through its executive, and have been approved on examination by the military authorities. The distribution of cases will be in the hands of the commissioners for the respective districts, and they will decide which institutions are to be ranked as auxiliary hospitals where the grant of 2*s.* per head per day will be given by the military authorities.

Lieutenant-Colonel J. Oldfield, R.A.M.C. (T.), commanding 3rd Reserve East Anglian Field Ambulance, writes from the Drill Hall, Walthamstow, to say that he will be pleased to hear from any medical man who wishes to obtain a commission.

There will be vacancies shortly in Field Ambulances earmarked for foreign service as well as in the Reserve Field Ambulance for home service. There will also be vacancies in combatant units for regimental medical officers. For a man who wishes to go abroad or who wishes to become a regimental medical officer it is always advisable that he should as soon as possible become attached to a field ambulance for training.

WAR GIFT FROM THE MEDICAL MEN OF ESSEX.—The members of the medical profession in the county of Essex have subscribed a sum of over £420, and have purchased therewith a fully equipped motor ambulance with four stretchers, &c., and have presented it to the War Office for use of the wounded in France and Belgium. The subscriptions have been obtained by the various medical officers of health in the county, and a complete list of the donors can be seen at the office of the county medical officer of health in Chelmsford. The ambulance will bear a brass plate, on which will be inscribed: "This Ambulance was Presented to the War Office by the Members of the Medical Profession in Essex, England, November, 1914."

INDIAN GIFTS FOR THE SICK AND WOUNDED.—It is announced that owing to the very generous response of the public from all parts of India a sufficient number of the original ten-bed units of Red Cross gifts for the sick and wounded of the Indian Expeditionary Force has already been received. This does not mean that no more gifts will be needed, but that in future the provision of comforts will be materially modified, and the St. John Ambulance Associa ion is therefore issuing a revised list of all articles it is considered desirable to renew, repeat, or replace. A large supply will be required to replace articles expended at the front. Naturally more gifts will be required for Indian than for British troops, and it is suggested that the proportion of Indian to British should be three to one.

CHOLERA IN AUSTRIA.—According to Austrian official reports published on Nov. 5th and referring to the week from Oct. 21st to Oct. 28th, 645 new cases of cholera were notified in the Austrian empire. These notifications referred to 60 or 70 localities. The following places seemed to form centres for the spread of an epidemic: Vienna, 14; Trappau, 20; Bereska, 23; Taliska, 24; Balygrod, 47; Krems, 105; Rozborg, 82. All the cases notified had occurred among soldiers returning from the battlefields.

A COMMITTEE has been formed in New York, under the auspices of *American Medicine*, for the collection of a fund for the relief of doctors in Belgium. The committee includes the names of Dr. W. S. Bainbridge, Dr. S. Ely Jelliffe, Dr. W. H. Porter, Dr. Parker Syms (of New York), and Dr. Charles E. de M. Sajous (of Philadelphia). It will work in coöperation with the Belgian Relief Committee.

APPLES FOR THE FRONT AS AN ANTISCORBUTIC.—Dr. H. Benjafield, of Moonah, Tasmania, in a letter dated Sept. 10th, calls attention to the importance of supplying our soldiers at the front with fresh fruit, especially apples, as a preventive against scurvy. He quotes the testimony of Dr. Buzzard, in "Reynolds's System of Medicine," based on his experience in the Crimean war of 1854, when the allied army had 25,000 men suffering therefrom, of whom thousands died, while the suffering from wounds and other diseases is increased thereby He suggests that Australia should begin at once to organise for the despatch of apples against the winter. At least 50,000 cases a week will be required. Doubtless when the need is realised much will be given, but measures should be taken also to purchase as near to cost price as possible. England should send her share, but he suggests that perhaps Canada and the United States would help. Dr. Benjafield points out that Professor McAlpine and others have shown that the health-giving properties of the apple are found in and immediately beneath the skin; consequently, a pound of sound two inch apples would contain more than a similar quantity of large fruit. The suggestion seems worthy of attention.

Medical News.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF ENGLAND.—At a meeting of Comitia of the Royal College of Physicians on Oct. 29th and of the Council of the Royal College of Surgeons on Nov. 12th, diplomas of L.R.C.P. and M.R.C.S. were respectively conferred upon the following 67 candidates who have passed the Final Examination in Medicine, Surgery, and Midwifery of the Conjoint Board, and have complied with the necessary by-laws:—

Ahmed Abdel-Al, Guy's Hospital; Bertram Pulvermacher Allinson University College Hospital; Lalit Mohan Banerji, L.M.S. Calcutta Calcutta University and St. Bartholomew's Hospital; George Arthur Batchelor, St. Mary's Hospital; William Arthur Haslerigg Noel Bell, St. Thomas's Hospital; William Francis Bensted-Smith, Cambridge University and Middlesex Hospital; Geoffrey Alwyn Gershom Bonser, B.A. Cantab., Cambridge University and St. Thomas's Hospital; William Edward Hugh Bull, B.A. Cantab., Cambridge University and London Hospital; Percy Herbert Burton, London Hospital; Sam Nathaniel Cohen, Leeds University; Gordon Cranstoun, B.A. Oxon., Oxford University and St. Thomas's Hospital; Harold Armstrong Crouch, B.A. Cantab., Cambridge University and London Hospital; John Duncan Legge Currie, Cambridge University and St. Bartholomew's Hospital; Delphine Gertrude D'Abreu, L.M.S. Punjab, Lahore University; John Edgar Davies, Guy's Hospital; John Llewellyn Davies, B.A. Cantab., Cambridge University and St. Bartholomew's Hospital; John Rhys Davies, Cardiff and Middlesex Hospital; Frederick Henry Dodd, Guy's Hospital; Hugh Alderson Fawcett, University College Hospital; Herbert Leslie Garson, B.A. Cantab., Cambridge University and St. Thomas's Hospital; James Alfred Gregory, Manchester University; David William Griffith, Cardiff and St. Thomas's Hospital; Stanley Sextus Barrymore Harrison, Guy's Hospital; William Clavering Hartgill, Otago University and London Hospital; Mary Isabel Hemingway, Birmingham University; Alec George Holman, London Hospital; John Christopher Jones, M.B., Ch.B. Birmingham, Birmingham University; Tom Ramsden Kenworthy, St. Bartholomew's Hospital and Leeds University; Geoffrey William King, Guy's Hospital; Louis Gaston Le Blanc, St. Bartholomew's Hospital; Helena Rosa Lowenfeld, Royal Free Hospital; Henry Wingate Maltby, St. Bartholomew's Hospital; Pestanji Manekji Masina, L.M.S.S.A. Lond., Bombay University and University College Hospital; Gerald Woffindin Maw, University College Hospital; Percy Uvedale Mawer, St. Bartholomew's Hospital; James Allen Montgomery, M.D. Manitoba, Manitoba University and London Hospital; William Howard Nicholls, Guy's Hospital; Arthur Henry Pemberton, University College Hospital; Alan Cecil Perry, London Hospital; Baddelianage Don Hugo Philip, L.M.S. Ceylon, Ceylon Medical College and London Hospital; H. Rivers Pollock, B.A. Cantab., Cambridge University and King's College Hospital; John Sandys Pooley, Cambridge University and St. Thomas's Hospital; Reginald Norman Porritt, B.A. Cantab., Cambridge University and London Hospital; Frank Greenhalgh Pretwich, Manchester University; Nicholas Purcell, M.B., Ch.B. Edinburgh, Edinburgh University and London Hospital; Philip Hugh Rawson, London Hospital; Geoffrey Stanhope Robinson, B.A. Oxon., Oxford University and St. Bartholomew's Hospital; Clive Watney Roe, Charing Cross Hospital; William Albert Rogerson, Manchester University; William Hugh Cowie Romanis, B.A. Cantab., Cambridge University and St. Thomas's Hospital; Pinthu Sai, Cambridge University and St. Thomas's Hospital; Mary Schofield, Royal Free Hospital; Donald Charles Scott, Durham University and Guy's Hospital; Edward Wheeler Scripture, M.D. Munich, Munich University and St. Bartholomew's Hospital; John Hunter Sewart, University College Hospital; Peter de Saffore Smith, Birmingham University; Harry Neville Stafford, B.A. Cantab., Cambridge University and St. Thomas's Hospital; John Frank Herbert Stallman, Guy's Hospital; Richard Patrick Aloysius Starkie, Cambridge University and St. Thomas's Hospital; Horatio Thomas, B.Sc. Lond., University College, Cardiff, and St. Mary's Hospital; John Oscar Thomas, King's College and Westminster Hospital; William Godfried Lorenz Wambeek, Ceylon Medical College and Middlesex Hospital; John Rollo Noel Warburton, St. Thomas's Hospital; Watkin Watkins, University College, Cardiff, and University College Hospital; Thomas Burges Welch, St. Bartholomew's Hospital; Douglas Henry David Wooderson, St. Bartholomew's Hospital; William Arthur Young, B.Sc. Lond., Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The Council conferred the Diploma of Fellow upon Robert Lister Horton, M.B., B.S. Lond., L.R.C.P., Lond., M.R.C.S. Eng., of University College Hospital, who has previously passed the examination and has now attained the requisite age of 25 years. The licence in Dental Surgery was also conferred upon Francis Arthur Everett, Charing Cross and Royal Dental Hospitals, who has passed the requisite examinations and has now complied with the by-laws.—At the Primary Examination for the Fellowship in Anatomy and Physiology, held on Nov. 4th, 5th, 10th, and 11th, 57 candidates presented themselves, of whom 15 were approved and 42 were rejected. Among the successful candidates were two ladies—Miss Bostock and Miss Ingleby, both of the London School of Medicine for Women. The following is a list of the successful candidates:—

Jugalkishor Adhya, M.B. Calcutta, Calcutta University and Middlesex Hospital; Marion Noel Bostock, London School of Medicine for Women; Leonard Snowden Debenham, Guy's Hospital; Spencer Graeme Dunn, St. Bartholomew's Hospital; Benjamin Thomas Edye, M.B., Ch.M. Sydney, Sydney University and University College; Arthur Norman Hooper, B.A., B.C. Cantab., M.R.C.S., L.R.C.P., Cambridge and Birmingham Universities; John Basil Hume, St. Bartholomew's Hospital; Helen Ingleby, London School of Medicine for Women; Harold George Victor Mence, Birmingham University; Arthur Eisdell Moore, M.D., Ch.B. Edin., Edinburgh University and St. Mary's Hospital; Sydney Devenish Rhind, St. George's Hospital and King's College; Tribhovandas Oghaddes Shah, M.R.C.S., L.R.C.P., Middlesex Hospital; James Renfrew White, M.B., B.S. New Zealand, M.R.C.S., L.R.C.P., New Zealand University and Middlesex Hospital; David Whyte, M.B., Ch.B. Otago, Otago University; and Graham Selby Wilson, King's College.

THE next session of the General Medical Council will commence on Tuesday, Nov. 24th.

Mr. George Mitchell Winter, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., D.P.H., has been reappointed deputy mayor of Torquay for the sixth consecutive year.

UNIVERSITY OF CAMBRIDGE.—The Raymond Horton-Smith prize has been awarded to Philip H. Bahr, M.A., M.B. Cantab., for his thesis for the M.D. degree on the subject of Research in Sprue.

WE announce with much regret the death on Saturday last of Dr. Eustace Smith, the veteran authority on diseases of children, who was for 43 years a member of the active medical staff of the East London Hospital for Children.

MEDICAL CALLS TO THE BAR.—Dr. W. Collingridge, of Pembury, late medical officer of health, City and Port of London, was on Nov. 17th called to the Bar as a Member of the Honourable Society of Gray's Inn; and on the same day Dr. James Campbell McNeillie, medical officer of the East Rand mines and hospital, was called to the Bar as a Member of the Middle Temple.

Dr. Aldo Castellani, Director of the Clinic for Tropical Diseases, Colombo, Ceylon, has been offered by the Italian Government, and has accepted, the professorship of tropical medicine in the University of Naples and the directorship of the Royal Clinique for Tropical Diseases in the same city. Dr. Castellani will take up his duties at the beginning of 1915.

CENTRAL MIDWIVES BOARD.—A special meeting of the Central Midwives Board was held at Caxton House, Westminster, on Nov. 12th, with Sir Francis H. Champneys in the chair. A number of midwives were struck off the roll, the following charges amongst others having been brought forward. The midwife being guilty of misconduct in assisting an uncertified person to attend women in childbirth otherwise than under the direction of a qualified medical practitioner, and in aiding and abetting the aforesaid person to commit an offence against Section 1 (2) of the Midwives Act, 1902. The midwife not being scrupulously clean in her person, appliances, and house, as required by Rule E. 1; not taking and recording the pulse and temperature of the patient at each visit, as required by Rule E. 13. The advice of a registered medical practitioner having been sought, the midwife failed to notify the local supervising authority thereof, as required by Rule E. 21 (1); she washed the patient once only, and then did not comply with the antiseptic requirements of Rule E. 7. The patient suffering from loss of blood, the midwife did not explain that the case was one in which the attendance of a registered medical practitioner was required, nor did she hand to the husband or the nearest relative or friend present the form of sending for medical help, properly filled up and signed by her, in order that this might be immediately forwarded to the medical practitioner, as required by Rule E. 20 (2). That having been in contact with a person suffering from puerperal fever the midwife continued in attendance upon patients without having undergone any disinfection to the satisfaction of the local supervising authority, as required by Rule E. 5. Medical aid having been sought for a patient, the midwife neglected to send any notification thereof to the local supervising authority, as required by Rule E. 21 (1), and she neglected and declined to carry out the instructions of the doctor who had been sent for, as required by Rule E. 6. A child having died before the attendance of a registered medical practitioner, the midwife failed to notify the local supervising authority thereof, as required by Rule E. 21 (1), and she did not keep her register of cases as required by Rule E. 23.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Parliament and the War.

PARLIAMENT has assembled for a new session. It is understood that the sittings will not be prolonged and will be entirely devoted to dealing with the financial and other problems arising out of the war. New taxation is necessary, and also a war loan for £350,000,000. The Chancellor of the Exchequer has announced that the income tax is to be doubled. The full increase does not come into operation in respect of the current year, when the rates will be 1*s.* in the £ on earned income and 1*s.* 8*d.* on unearned. Next year the rates will be 1*s.* 6*d.* and 2*s.* 6*d.* respectively. The war has been costing this country from £900,000 to £1,000,000 a day, and Mr. LLOYD GEORGE estimates that for the first full year it will cost £450,000,000. No criticism has been made of the Government proposals, because in all quarters there is a profound feeling that the world should have the spectacle of a nation absolutely united in the great emergency with which we are now confronted.

HOUSE OF COMMONS.

MONDAY, NOV. 16TH.

British Medical Men in Germany.

Mr. HAY MORGAN asked the Secretary of State for Foreign Affairs whether any steps had been taken to secure the release of medical men who were British subjects detained in Germany; and, if so, whether he could give any indication as to the date when they would be allowed to return home.—Sir EDWARD GREY replied: His Majesty's Government were informed on Oct. 3rd that the German Government might allow doctors and ministers of religion to return from Germany, and on Oct. 8th His Majesty's Government made a definite offer of reciprocal treatment with regard to these and three other classes of persons. On Oct. 22nd His Majesty's Government were informed that the German Government had accepted the offer and would permit the departure of medical men and ministers of religion, and since then medical men have been returning, though a doctor was detained at Bad Nauheim until last week. The answer refers to civilians only.

The Health of the Troops.

Lord CLAUDE HAMILTON asked the Secretary of State for the Home Department whether His Majesty's Government would introduce and pass a measure empowering magistrates to issue warrants for the summary arrest of women of notorious bad character who were infesting the neighbourhood of the various military camps in the United Kingdom, to the detriment of the morals and health of the troops, and further to empower the magistracy to commit such women for detention in a hospital or reformatory until the close of the war.—Mr. MCKENNA said in reply: While the Government recognise the serious nature of the evil to which the noble lord alludes, I fear it would not be possible to deal with it effectively by such legislation as he recommends. We must rely partly on the organised efforts which are being made by voluntary women workers and partly on the firm enforcement of the existing law by the police and the magistrates.

Care of Soldiers' Feet.

Answering Sir CLEMENT KINLOCH-COOKE, Mr. TENNANT (Under Secretary of State for War) said: The arrangements for the employment of chiropodists in the regular army have been made applicable to the Territorial Forces.

Calf Lymph for the Army.

In reply to Sir CLEMENT KINLOCH-COOKE, Mr. TENNANT said: The vaccination lymph used in the army is obtained

from the Local Government Board establishment at Hendon, and is believed to be the same as that supplied by the Board to public vaccinators.

The Wastage in the New Army.

In the course of the debate on the vote of credit Sir IVOR HERBERT remarked that there was an abnormal wastage going on in the ranks of units of the new army which had already been raised—a wastage which required some explanation and the adoption of measures to check it. According to figures which had been given to him, there had been a wastage in many units of as much as from 30 to 40 per cent. of the strength of the unit, and it was due to what was known in military language generally as "avoidable disease." It was a very serious question, and it was one which it behoved the Government and the military authorities to give close attention to, now that they were dealing with the question of raising a further number of recruits. It was unavoidable possibly that a large number of young men thrown into temptation which they had never faced before should suffer in the way which they had done. But at the same time it should have been evident to those accustomed to military organisation that special police measures were required to restrain the causes of this most unfortunate condition of affairs. At present, to put it plainly, the great wastage that was going on in the ranks of the new army came from two causes, and two causes only—drink and women. But both these were causes which could be dealt with by administrative measures, and he urged that some measures should be taken. If the powers in the hands of either the local bodies or the military authorities were not sufficient to restrain the sale of drink or the other social evil, then the Government should come to Parliament and propose such measures as might be necessary to enable them to deal with the problems. That anything like that wastage should be allowed to go on unchecked in the ranks of the new army was certainly a most serious matter. It had been a most distasteful and unpleasant thing for him to bring it before the House of Commons, and it was only a sense of duty and also the knowledge which he had gained of these things during his military experience that had induced him to rise and speak on this question.

Sir T. WHITTAKER urged the Government to take every means to check insobriety amongst recruits.

Mr. COURTHOPE doubted very much whether a single unit could be named in which either 30 per cent. or 40 per cent. of wastage had occurred. He would say without fear of contradiction that in the great majority of localities and the great majority of units the sobriety of the recruits had been very noticeable, and there had been an astonishing freedom from avoidable disease. In the unit with which he was connected, of some 1600 or 1700 men who had been up since the beginning of the war and stationed in places in which it might be expected that there would be temptation, there had not been a single case of venereal disease. He did not quote this as being exceptional, because he knew of scores and scores of units with an equally good record, but he did not want it to go out as the result of this debate that there had been a great prevalence of avoidable disease or excessive drunkenness.

Mr. ASQUITH (in his reply to the debate said): An honourable Member has raised the question of the alleged demoralisation through drink and other causes to which he adverted of a substantial proportion of the new army. I think that my honourable and gallant friend—I am sure quite unintentionally—took in this respect a much too gloomy view. We have made most careful inquiry into the matter, and to say that a percentage of from 30 to 40 of these men are disabled from preventable causes, from diseases, from serving their country in any useful manner is, I believe, entirely without any foundation. The Adjutant-General has made most careful inquiry into the matter. I do not commit myself to specific figures, but I believe that it would be far nearer the truth to say that there have not been more than 10, or at the outside 15, per cent. of cases of disease of every sort or kind, not only these particular ones, but all sorts of diseases of every kind, and on the whole I do not believe that there has ever been brought together a body of men who have comported themselves so well and shown such a regard for sobriety and decency of conduct as the new recruits for the army. Undoubtedly these men, as is always the case when a large aggregation of comparatively young men are brought together in this casual way, are exposed to temptation to which some of them are probably strangers and to which now and again individuals succumb. But I believe if you take the average standard of conduct that it is worthy of the country and worthy of the cause. But my honourable friend may be quite sure that the Adjutant-General, in conjunction with the civil authorities, is taking every possible step to remove all temptation and to secure the highest possible standard of sobriety and conduct in those troops.

WEDNESDAY, NOV. 18TH.

Medical Practitioners with Temporary Commissions.

Sir PHILIP MAGNUS asked the Financial Secretary to the War Office whether a medical practitioner now serving in the Royal Army Medical Corps with a temporary commission was entitled to a pension for wounds at the same rate and under the same conditions as officers holding permanent commissions; and whether, in the event of his death, his widow and orphans would be entitled to a pension, and, if so, at what rate.—Mr. H. BAKER replied: Yes, Sir; the rates and conditions are fully set out in the pay warrant.

Appointments.

Successful applicants for vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.

CASTELLANI, ALDO, M.D. Florence, has been appointed Professor of Tropical Medicine in the University of Naples.

FERGUSON, J. J. HARROWER, M.B., Ch.B. Edin., has been appointed Medical Superintendent at Fife and Kinross Asylum, Springfield.

PHILLIPS, G. C. J., L.S.A., M.R.C.S. Eng., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Woburn Sands District of the County of Bedford.

RAMSDEN, WALTER, M.D., Ch.B. Oxon., has been appointed to the Johnston Chair of Biochemistry in the University of Liverpool.

WADSWORTH, T. W., M.D., Ch.B. Liverp., has been appointed Temporary Medical Officer of Health for the County of Dorset.

WEAR, A. H., M.B., B.S. Durh., has been appointed Assistant Medical Officer of Health and School Medical Officer to the South Shields Education Committee.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BARROW-IN-FURNESS, NORTH LONSDALE HOSPITAL.—House Surgeon. Salary £150 per annum, with residence, board, and laundry.

BIRKENHEAD BOROUGH HOSPITAL.—Junior House Surgeon. Salary £100 per annum, with board and laundry.

BIRKENHEAD UNION INFIRMARY.—Female Resident Assistant Medical Officer. Salary at rate of £150 per annum, with board, washing and apartments.

BIRMINGHAM AND MIDLAND EYE HOSPITAL, Church-street.—Junior House Surgeon. Salary £100 per annum, with residence, board, &c.

BIRMINGHAM, CITY OF.—Assistant Medical Officer of Health. Salary £300 per annum.

BIRMINGHAM EDUCATION COMMITTEE.—Assistant School Medical Officer. Salary at rate of £300 per annum.

BIRMINGHAM, WEST HEATH SANATORIUM AND HOSPITAL.—Medical Superintendent, unmarried. Salary at rate of £300 per annum, with board and residence.

BIRMINGHAM, YARDLEY-ROAD SANATORIUM AND ANTI-TUBERCULOSIS CENTRE.—First Assistant Medical Officer. Salary £250 per annum, with board and residence. Also Third Assistant Medical Officer. Salary £200 per annum, with board and residence.

BLACKBURN COUNTY BOROUGH.—Temporary Resident Medical Officer. Salary £200 per annum, with board and residence.

BRADFORD POOR-LAW UNION, ST. LUKE'S HOSPITAL AND UNION HOUSE.—Assistant Resident Medical Officer, unmarried. Salary £150 per annum, with rations, apartments, and washing.

BRADFORD ROYAL INFIRMARY.—House Surgeon, unmarried. Salary £100 per annum, with board, residence, and washing.

BRIGHTON, ROYAL SUSSEX COUNTY HOSPITAL.—Assistant House Surgeon, unmarried. Salary £80 per annum, with apartments, board, and laundry.

CARDIFF, KING EDWARD VII.'S HOSPITAL.—House Surgeons for six months. Salary at rate of £100 per annum, with board, residence, and laundry. Also Resident Surgical Officer. Salary £160 per annum, with board, laundry, and apartments.

CARLISLE, CUMBERLAND AND WESTMORLAND ASYLUM, Garlands.—Junior Assistant Medical Officer, unmarried. Salary £200 per annum, with board, lodging, and washing.

CHESTER COUNTY ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £200 per annum, with board, lodging, and washing.

CHICHESTER, ROYAL WEST SUSSEX HOSPITAL.—House Surgeon, unmarried. Salary £110 per annum, with board, residence, and washing.

CITY OF WESTMINSTER UNION INFIRMARY, Fulham-road, S.W.—Second Assistant Medical Officer and Third Assistant Medical Officer. Salaries £160 and £140 per annum respectively, with board, residence, and washing.

COVENTRY AND WARWICKSHIRE HOSPITAL, Coventry.—Junior House Surgeon. Salary £100 per annum, with rooms, board, washing, and attendance.

DERBY BOROUGH ISOLATION HOSPITAL AND SANATORIUM.—Resident Medical Officer. Salary £200 per annum, with board and residence.

DEWSBURY AND DISTRICT GENERAL INFIRMARY.—House Surgeon. Salary £120 per annum, with board, residence, and laundry.

DUDLEY, GUEST HOSPITAL.—Senior Resident Medical Officer. Salary £120 per annum, with board, residence, attendance, and washing.

DURHAM COUNTY COUNCIL.—Assistant School Medical Officer. Salary £300 per annum.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark, S.E.—House Surgeon. Salary at rate of £75 per annum, with board, residence, and washing.

FAREHAM, HANTS COUNTY ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £250 per annum, with apartments, board, washing, and attendance.

FULHAM INFIRMARY, St. Dunstan's-road, Hammersmith, W.—Assistant Medical Superintendent and Junior Assistant Medical Officer, unmarried. Salaries at rate of £200 and £160 per annum respectively, with board, apartments, attendance, and washing.

GLASGOW ROYAL MATERNITY AND WOMEN'S HOSPITAL (OBSTETRICAL DEPARTMENT).—Two Out-door House Surgeons at the Hospital and Out-door House Surgeon at West-end Branch for three months.

GLOUCESTER, GLOUCESTERSHIRE ROYAL INFIRMARY AND EYE INSTITUTION.—Assistant House Surgeon for six months. Salary at rate of £80 per annum, with board, residence, and washing.

GREAT YARMOUTH HOSPITAL.—House Surgeon, unmarried. Salary £200 per annum, with board, lodging, and washing.

HACKNEY UNION INFIRMARY, High-street, Homerton, N.E.—Junior Assistant Medical Officer for six months. Salary £200 per annum, with rations, apartments, and attendance.

HAMPSHIRE COUNTY COUNCIL.—Tuberculosis Officer. Salary £500 per annum.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House Physician for six months. Salary 30 guineas.

HUDDERSFIELD ROYAL INFIRMARY.—Senior and Junior Assistant House Surgeons. Salary £80 per annum each, with board, rooms, and washing.

HUDDERSFIELD, STORTHES HALL ASYLUM, Kirkburton.—Assistant Medical Officer. Salary £230 per annum, with rooms, board, attendance, and washing.

KEIGHLEY, BOROUGH OF.—Assistant School Medical Officer and Assistant Medical Officer of Health. Salary £300 per annum.

LEEDS HOSPITALS FOR INFECTIOUS DISEASES AND TUBERCULOSIS.—Assistant Medical Officer, unmarried, for six months. Salary at rate of £150 per annum, with board, lodging, and washing.

LEEDS PUBLIC DISPENSARY.—Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry.

LEYTON, WALTHAMSTOW, AND WANSTEAD CHILDREN'S AND GENERAL HOSPITAL.—Resident House Surgeon. Salary at rate of £125 per annum, with rooms, board, and washing.

LIVERPOOL, BROWNLOW HILL INSTITUTION.—Resident Assistant Medical Officer. Salary £200 per annum, with apartments and resident allowances.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Female Assistant Resident Medical Officer. Salary at rate of £120 per annum, with board, residence, and laundry.

LOWESTOFT AND NORTH SUFFOLK HOSPITAL.—House Surgeon, unmarried. Salary at rate of £150 per annum, with board, residence, and laundry.

MACCLESFIELD GENERAL INFIRMARY.—House Surgeon. Salary £150 per annum, with residence, board, and laundry.

MAIDSTONE, KENT COUNTY ASYLUM.—Female Junior Assistant Medical Officer, unmarried. Salary £250 per annum, with board, quarters, attendance, washing, &c.

MANCHESTER, CITY OF.—Assistant Tuberculosis Officer. Salary £350 per annum.

MANCHESTER INSTITUTION AT CRUMPSALL.—Junior Resident Assistant Medical Officer, unmarried. Salary £160 per annum, with rations, apartments, fire, light, washing, and attendance.

MANCHESTER NORTHERN HOSPITAL FOR WOMEN AND CHILDREN, Parkplace, Cheetham Hill-road.—House Surgeon. Salary £120 per annum, with apartments and board.

MANCHESTER ROYAL EYE HOSPITAL.—Junior House Surgeon. Salary £80 per annum, with residence, board, and washing.

METROPOLITAN EAR, NOSE, AND THROAT HOSPITAL, Fitzroy-square, W.—House Surgeon. Salary £150 per annum.

MIDDLESBROUGH, NORTH ORMESBY HOSPITAL.—House Surgeon. Salary £150 per annum, with board, washing, and attendance.

MILLER GENERAL HOSPITAL FOR SOUTH-EAST LONDON, Greenwich-road, S.E.—Senior House Surgeon for six months. Salary £100 per annum, with board, residence, and laundry.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART, Westmoreland-street, W.—Resident Medical Officer for six months. Salary at rate of £80 per annum, with board, residence, and washing.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen-square, Bloomsbury, W.C.—Senior and Junior House Physicians. Salary £50 per annum each, with board and residence.

NEWCASTLE, Co. WICKLOW, ROYAL NATIONAL HOSPITAL FOR CONSUMPTION FOR IRELAND.—Assistant Resident Medical Officer. Salary at rate of £200 per annum, with board and residence.

NEWCASTLE-UPON-TYNE EDUCATION COMMITTEE.—Assistant Medical Officers (Male and One Female). Salary £250 per annum.

NEWCASTLE-UPON-TYNE POOR-LAW INSTITUTION INFIRMARY.—Female Second Assistant Resident Medical Officer, unmarried. Salary at rate of £150 per annum, with apartments, rations, and washing.

NEWPORT (MON.), ROYAL GWENT HOSPITAL.—Resident Medical Officer. Salary for first six months at rate of £10) per annum, second six months £125, and third six months £150, with board, residence, and laundry.

NORTHUMBERLAND, COUNTY OF.—Female Assistant School Medical Inspector. Salary £300 per annum.

NOTTINGHAM GENERAL HOSPITAL.—Senior House Physician. Salary £120 per annum, with board, residence, and laundry.

PRESTON ROYAL INFIRMARY.—Assistant Resident Medical and Surgical Officer. Salary £120 per annum, with board, residence, and laundry.

ROYAL COLLEGE OF PHYSICIANS, Pall Mall East.—Milroy Lecturer for 1916.

ROYAL FREE HOSPITAL, Gray's Inn-road, W.C.—Acting Assistant Physician

ROYAL LONDON OPHTHALMIC HOSPITAL, City-road, E.C.—Two Refraction Assistants. Salary at rate of £50 per annum.

ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN, S.E.—Senior and Junior Resident Medical Officers. Salaries at rate of £90 and £70 per annum respectively, with board and washing.

ST. PANCRAS NORTH INFIRMARY, Dartmouth Park Hill, Highgate, N.—Junior Assistant Medical Superintendent. Salary at rate of £140 per annum, with apartments, board, and washing.

ST. PANCRAS SOUTH INFIRMARY, Pancras-road, N.W.—Senior Assistant Medical Superintendent and Senior Assistant Medical Officer of House adjacent. Salary at rate of £225 per annum, with board, apartments, and washing. Also Female Junior Assistant Medical Officer. Salary at rate of £150 per annum, with apartments, board, and washing.

SALFORD ROYAL HOSPITAL.—Resident Surgical Officer and Casualty House Surgeon for six months. Salary at rate of £120 and £100 per annum respectively, with board and residence.

SALFORD UNION INFIRMARY.—Resident Assistant Medical Officer, unmarried. Salary £150 per annum, with apartments, attendance, and rations.

SHEFFIELD, EAST-END BRANCH OF THE CHILDREN'S HOSPITAL.—House Surgeon. Salary £120 per annum, with board and residence.

SHEFFIELD ROYAL HOSPITAL.—Assistant House Physician, unmarried. Salary £80 per annum, with board, lodging, and washing

SHEFFIELD ROYAL INFIRMARY.—House Surgeon. Salary £100 per annum, with board and residence.

SHEFFIELD, SOUTH YORKSHIRE ASYLUM, Wadsley.—Fourth Assistant Medical Officer. Salary £200 per annum, with apartments, board, and attendance.

SHETLAND, COUNTY OF.—School Medical Officer, County Medical Officer and Mainland District Medical Officer, and Tuberculosis Officer. Salary £500 per annum.

SOUTH SHIELDS COUNTY BOROUGH.—Assistant Medical Officer of Health and Assistant School Medical Officer. Salary £300 per annum.

SOUTH SHIELDS, INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Junior House Surgeon. Salary £115 per annum, with residence, board, and washing.

STAFFORDSHIRE COUNTY COUNCIL MENTAL HOSPITAL, Cheddleton, Leek.—Senior Assistant Medical Officer. Salary £320 per annum, with apartments, board, and washing.

SUNDERLAND, MONKWEARMOUTH AND SOUTHWICK HOSPITAL.—House Surgeon. Salary £130 per annum, with board, lodging, and washing.

SWANSEA UNION INSTITUTION.—Resident Assistant Medical Officer. Salary £295 per annum.

TAUNTON, TAUNTON AND SOMERSET HOSPITAL.—Senior House Surgeon and Assistant House Surgeon. Salaries £120 and £80 per annum respectively, with board, lodging, and laundry.

TRURO, ROYAL CORNWALL INFIRMARY.—House Surgeon, unmarried. Salary £100 per annum, with rooms, board, and washing.

TUNBRIDGE WELLS GENERAL HOSPITAL.—House Physician, unmarried. Salary £100 per annum, with board, residence, &c.

UNIVERSITY OF LONDON.—University Chair of Physiology at London Hospital Medical College. Salary £600 per annum.

VICTORIA HOSPITAL FOR CHILDREN, Tite-street, Chelsea, S.W.—House Surgeon for six months. Salary £40, with board, laundry, and lodging.

WAKEFIELD, WEST RIDING ASYLUM.—Locum Tenens Assistant Medical Officer. Salary as arranged, with apartments, board, and travelling expenses.

WALSALL AND DISTRICT HOSPITAL.—Junior House Surgeon and Anæsthetist. Salary £110 per annum, with board, residence, and laundry.

WARRINGTON INFIRMARY AND DISPENSARY.—Senior House Surgeon. Salary at rate of £200 per annum, with board, apartments, and laundry.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, Welbeck-street, W.—Clinical Assistants to Out-patients' Physicians. Also Anæsthetist.

WEST HAM AND EASTERN GENERAL HOSPITAL, Stratford, E.—Senior House Physician. Salary £120 per annum, with board, residence, and washing.

WESTMINSTER HOSPITAL.—Surgical Registrar. Salary £50 per annum.

WHITECHAPEL UNION INFIRMARY, Vallance-road, E.—First Assistant Resident Medical Officer. Salary £160 per annum, with rations, apartments, and washing.

WIGAN, ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY.—Senior House Surgeon. Salary £170 per annum, with board, apartments, and washing.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Resident Medical Officer for six months. Salary at rate of £125 per annum, with board, rooms, and laundry.

WORCESTER COUNTY AND CITY ASYLUM, Powick, near Worcester.—Junior Assistant Medical Officer. Salary £225 per annum, with board, lodging, and washing.

WORCESTER GENERAL INFIRMARY.—Resident Medical Officer. Salary £150 per annum, with board, residence, and washing.

WORKSOP VICTORIA HOSPITAL AND DISPENSARY.—Medical Officer and House Surgeon. Salary £150 per annum, with rooms, coal, light, and attendance.

YORK COUNTY HOSPITAL.—House Physician for six months. Salary at rate of £100 per annum, with board, residence, and washing.

Births, Marriages, and Deaths.

BIRTHS.

VELLACOTT.—On Nov. 12th, at Tamar-terrace, Devonport, the wife of Harold F. Vellacott, F.R.C.S., of a son.

VOST.—On Nov. 10th, at "Fyzabad," Crystal Palace Park-road, Sydenham, the wife of Lieutenant-Colonel Vost, I.M.S., of a daughter.

MARRIAGES.

BROWN—SIMPSON.—On Nov. 13th, at Adelaide, South Australia, Gilbert Brown, M.B., Ch.B., of Snowtown, South Australia, to Marie Simpson, M.B., B.S., D.P.H., of Nottingham, England.

DEATHS.

HYDE.—On Nov. 8th, at Croyde, N. Devon, George Edwin Hyde, M.R.C.S., L.R.C.P. Lond., of Bassett Heath, Southampton (late of Worcester), aged 79 years.

MOLINE.—On Nov. 10th, at Walton-street, S.W., Paul Frank Moline, M.B., M.R.C.S., aged 57 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

During the continuance of the war the size of THE LANCET *will be curtailed. This has been necessitated primarily by the difficulty in ensuring an adequate supply of paper, but the contributions of most of our correspondents on the continent have failed, and will fail, to reach us. Many special features of* THE LANCET *have had to be sacrificed for the time, and while we ask the indulgence of our readers for this, we promise to restore them at the earliest possible opportunity.*

ACTION ON A SURGEON'S ACCOUNT.

IN the Manchester county court Professor J. W. Smith obtained judgment for £15 15*s.* and costs against Mr. A. Dasent, a clerk in the House of Commons, for services rendered. The plaintiff had been summoned at night from Manchester by telephone to attend the defendant who was on a visit to Lord Acton at Appleton Hall, a distance of 20 miles, and had gone prepared to perform an operation, which had been found unnecessary. The defendant, whose salary was £500 per annum, claimed to be prevented by poverty from paying, but had made no such suggestion when he first received the account, or, the plaintiff said, it would have been reduced. The defendant had written to say that he could not afford either to go to Manchester to defend the action or to employ a solicitor, and to ask that the claim should be heard in a London court. His honour Judge Mellor, however, observed that the defendant was able to go to Manchester to stay with Lord Acton, and found that the fee asked was reasonable.

THE "LONDON PANEL COMMITTEE GAZETTE."

To the Editor of THE LANCET.

SIR,—In reference to your comments on the "London Panel Committee Gazette," I desire as chairman of the committee dealing with the matter of over-prescribing in the county to say that neither I nor my committee had anything to do with this "surprising document." Kindly publish this, because the "document" might deter *gentlemen* from coming before the committee.

I am, Sir, yours faithfully,
Greenwich, Nov. 13th, 1914. C. W. HOGARTH.

BACILLARY AND AMŒBIC DYSENTERY.

To the Editor of THE LANCET.

SIR,—With reference to the question recently proposed in THE LANCET (Sept. 12th, p. 686) as to the diagnosis between bacillary and amœbic dysentery through inspection of the stools, it may be mentioned that Fleet-Surgeon Staby and Staff-Surgeon Kobert, of the German navy, working at Tsingtau, in China, made a report on the matter in the Blue-book on the Health of the German Navy for 1908-9, p. 61. They found that there were very few white corpuscles in the slime of amœbic dysentery, which was consequently transparent; many white corpuscles in the slime of bacillary dysentery, which is whitish and opaque. When blood is also present the slime of amœbic dysentery is clear and like raspberry jelly, while that of bacillary dysentery is a dirty brownish-red. The diagnosis can often be made with the naked eye, but the microscope further shows Charcot-Leyden crystals in the amœbic stools.

I am, Sir, yours faithfully,
W. E. HOME, M.D. Edin.,
Fleet-Surgeon, R.N. (retired.)
Victoria, B.C., Oct. 3rd, 1914.

THE "WELLCOME" PHOTOGRAPHIC EXPOSURE RECORD AND DIARY.

THE little pocket diary and exposure record, price in the British Isles 1*s.*, which Messrs. Burroughs, Wellcome, and Co. have now issued for several years past, makes an excellent Christmas present for photographers, and for this reason the 1915 diary has been issued in good time. It is exactly suited to the needs of the amateur, while it contains valuable reminders for the expert photographer. Clear and simple directions are given as to the various processes of photography, and all sorts of "wrinkles" are described. Fixed inside the cover of the book is a calendar giving the necessary exposure for any time of the day or year. The book is specially ruled for the many details which the photographer requires to note. Editions are published for the northern and southern hemispheres and for the United States.

THE International Sleeping Car Company last Saturday commenced to run sleeping car services between Paris and the Riviera as far as Mentone and between Paris and Rome. Both services leave the Gare de Lyon, Paris, at 8.5 P.M. daily. From London the obviously best service to join these special services is the 10 A.M. Victoria, Folkestone, and Dieppe, arriving in Paris at 9.42 P.M., where the night must be passed, joining the special service the next day at 8.5 P.M. The company, whose offices are at 20, Cockspur-street, Charing Cross, issue tickets and advise as to hotels in Paris where passengers may stay at night. In this connexion we observe that the South-Eastern and Chatham Railway call the particular attention of passengers by the 10 A.M. train to the necessity of their heavy luggage and keys being at Victoria-station by 8 A.M. and their hand luggage by 9 A.M.

W. F.—The *Indian Ambulance Gazette* is published at Jutogh, Simla, India, monthly, price 6 annas, post free.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Medical Diary for the ensuing Week.

SOCIETIES.

ROYAL SOCIETY OF MEDICINE, 1, Wimpole-street, W.

MONDAY.
SECTION OF ODONTOLOGY (Hon. Secretaries—F. Coleman, F. M. Smyth): at 8 P.M.
Paper:
Dr. H. Lambert Lack: The Influence of Nasal Obstruction on Abnormalities of the Jaws.
(SECTION OF LARYNGOLOGY.—The Members of this Section are specially invited to attend this meeting.)

THURSDAY.
SECTION OF BALNEOLOGY AND CLIMATOLOGY (Hon. Secretaries—Chas. W. Buckley, J. Campbell McClure): at 5.30 P.M.
Dr. Sunderland: Old London's Spas, Baths, and Wells.

FRIDAY.
SECTION FOR THE STUDY OF DISEASE IN CHILDREN (Hon. Secretaries—Philip Turner, J. D. Rolleston, Sidney Gilford): at 4.30 P.M.
Cases:
Dr. F. J. Poynton: Case of Cleido-cranio-dystosis with Pressure on Brachial Plexus; Symptoms Relieved by Operation.
Dr. E. B Gunson: Infant with Tooth Erupted at Birth.
Dr. Bernard Myers: Splenomegaly Improved by Anti-syphilitic Treatment.
Dr. J. D. Rolleston: Giant Nævus.
Mr. L. Bromley: Tumour of Femur.
Mr. Philip Turner: Case of Undescended Testicle; Result of Operation.
Dr. T. R. Whipham: Two Cases of Heart Block.
SECTION OF EPIDEMIOLOGY AND STATE MEDICINE (Hon. Secretaries—G. S. Buchanan, W. Butler): at 8.30 P.M.
Papers:
Dr. W. G. Armstrong (Senior Medical Officer of Public Health, New South Wales): The Recent Epidemic of Small-pox in New South Wales: its Diagnosis and Prevention.
Dr. J. Burton Cleland and Dr. E. W. Ferguson (State Microbiological Laboratory, Department of Public Health, New South Wales): The Nature of the Recent Small-pox Epidemic in Australia.
(Members desiring advance proofs should communicate with Dr. G. S. Buchanan, Local Government Board.)

MEDICAL SOCIETY OF LONDON, 11, Chandos-street, Cavendish-square, W.

MONDAY.—8.30 P.M., Resumed Discussion on the Surgical Experiences of the Present War. Continued by Mr. D'Arcy Power, Mr. Symonds, Mr. R. P. Rowlands, Dr. Embleton, Dr. I. Bruce, and others.

HUNTERIAN SOCIETY, London Hospital, Mile End-road, E.

WEDNESDAY.—4 P.M., Clinical Afternoon. Dr. J. H. Sequeira: Demonstration of Skin Diseases.

ROYAL SOCIETY OF ARTS, John-street, Adelphi, W.C.

WEDNESDAY.—8 P.M., Sir William A. Tilden: The Supply of Chemicals to Great Britain and her Dependencies.

HARVEIAN SOCIETY OF LONDON, Stafford Rooms, Titchborne-street, Edgware-road, W.

THURSDAY.—8.30 P.M., Discussion on the Drug Habit and its Treatment by Modern Methods (opened by Dr. C. Miller, Dr. T. B. Hyslop, and Dr. Claye Shaw).

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

NORTH-EAST LONDON POST-GRADUATE COLLEGE, Prince of Wales's General Hospital, Tottenham, N.

MONDAY.—Clinics:—10.30 A.M., Surgical Out-patient (Mr. H. Gillespie). 2.30 P.M., Medical Out-patient (Dr. T. R. Whipham); Gynæcological (Dr. J. B. Banister). 3 P.M., Medical In-patients (Dr. R. M. Leslie).

TUESDAY.—2.30 P.M., Operations. Clinics:—Medical Out-patient (Dr. A. G. Auld); Nose, Throat, and Ear (Mr. H. D. Gillies). X Rays and Electrical Methods (Dr. Metcalfe). 3.30 P.M., Medical In-patient (Dr. A. J. Whiting).
WEDNESDAY.—Clinics:—2 P.M., Throat. Operations (Mr. Gillies). 2.30 P.M., Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3.30 P.M., Special Demonstration of Selected Eye Cases (Mr. R. P. Brooks). 5.30 P.M., Eye Operations (Mr. Brooks).
THURSDAY.—2.30 P.M., Gynæcological Operations (Dr. A. R. Giles). Clinics:—Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson); X Rays and Electrical Methods (Dr. Metcalfe).
FRIDAY.—2.30 P.M., Operations. Clinics:—Medical Out-patient (Dr. A. G. Auld); Surgical (Mr. E. Gillespie); Eye (Mr. R. P. Brooks). 3 P.M., Medical In-patient (Dr. G. P. Chappel).

POST-GRADUATE COLLEGE, West London Hospital, Hammersmith-road, W.
MONDAY.—10 A.M., Dr. Simson: Diseases of Women. 10.30 A.M., Medical Registrar: Demonstration of Cases in Wards. 12 noon, Dr. Bernstein: Pathological Demonstration. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. D. Armour: Operations. Dr. Pritchard: Bacterial Therapy Department. Mr. B. Harman and Mr. Gibb: Diseases of the Eye.
TUESDAY.—10 A.M., Dr. Robinson: Gynæcological Operations. Dr. Owen: Demonstration of Cases in Wards. 12 noon, Mr. T. Gray: Demonstration of Fractures, &c. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Baldwin: Operations. Dr. Davis: Diseases of the Throat, Nose, and Ear. Dr. Pernet: Diseases of the Skin.
WEDNESDAY.—10 A.M., Dr. Saunders: Diseases of Children. Dr. Davis: Operations of the Throat, Nose, and Ear. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Pardoe: Operations. Dr. Simson: Diseases of Women. Mr. Gibb: Diseases of the Eye.
THURSDAY.—9 A.M., Dr. Bernstein: Bacterial Therapy Department. 10.30 A.M., Dr. Simson: Gynæcological Demonstration. 12 noon, Lecture:—Dr. G. Stewart: Neurological Cases. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. D. Armour: Operations. Mr. B. Harman: Diseases of the Eye.
FRIDAY.—10 A.M., Dr. Robinson: Gynæcological Operations. 10.30 A.M., Surgical Registrar: Demonstration of Cases in Wards. 12.15 P.M., Lecture:—Dr. Bernstein: Applied Pathology. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Baldwin: Operations. Dr. Davis: Diseases of the Throat, Nose, and Ear. Dr. Pernet: Diseases of the Skin.
SATURDAY.—10 A.M., Dr. Saunders: Diseases of Children. Dr. Davis: Operations of the Throat, Nose, and Ear. Mr. B. Harman: Eye Operations. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Pardoe: Operations.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen-square, Bloomsbury, W.C.
TUESDAY.—3.30 P.M., Lecture:—Dr. A. Turner: Clinical Cases.
FRIDAY.—3.30 P.M., Lecture:—Dr. F. Buzzard: Clinical Cases.

CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL, Gray's Inn-road, W.C.
FRIDAY.—3 P.M., Lecture:—Mr. Stuart-Low: The Ear.

THE THROAT HOSPITAL, Golden-square, W.
MONDAY.—5.15 P.M., Special Demonstration of Selected Cases.
THURSDAY.—5.15 P.M., Clinical Lecture.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, 49, Leicester-square, W.C.
TUESDAY.—4 P.M., Dr. C. R. Kempster: X Rays, Measurement of Dose.
THURSDAY.—6 P.M., Chesterfield Lecture:—Dr. M. Dockrell: Acne, Real and "So-called."

CHADWICK PUBLIC LECTURES, Bedford College, Regent's Park, N.W.
SATURDAY.—3 P.M., Dr. A. T. Nankivell: Camp, Ship, and Hospital Hygiene—III., Nursing our Soldiers and Sailors Back to Health (illustrated with lantern slides).

MANCHESTER HOSPITALS POST-GRADUATE CLINICS.
THURSDAY.—ANCOATS HOSPITAL, Mill-street.—4.30 P.M., Mr. H. Platt: Static Disabilities of the Foot.

For further particulars of the above Lectures, &c., see Advertisement Pages.

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(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Nov. 18th, 1914.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks.
Nov. 12	29·90	W.	0·01	72	55	42	41	44	Fine
,, 13	29·65	S.W.	0·07	57	56	44	51	53	Overcast
,, 14	29·51	N.	...	75	44	42	40	42	Cloudy
,, 15	29·38	S.E.	0·04	75	53	36	41	45	Cloudy
,, 16	29·40	N.	...	71	48	36	42	44	Cloudy
,, 17	30·26	N.	...	69	45	37	36	38	Fine
,, 18	30·56	N.E.	...	53	44	37	37	38	Hazy

The following magazines, journals, &c., have been received:—Philippine Journal of Science, Indian Medical Gazette, Medical Review of Reviews, Pediatrics, Midland Medical Journal, Canadian Practitioner, Symons's Meteorological Magazine, Ophthalmology, British Journal of Dental Science, American Journal of Roentgenology, Journal of Surgery, Dublin Journal of Medical Science, Canadian Journal of Medicine and Surgery, Indian Medical Journal, Journal of Hygiene, Clinical Medicine, Bulletin of the Johns Hopkins Hospital.

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